TOWARDS A EUROPEAN MODEL OF DEVELOPMENT

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CONFERENCE
INDUSTRY AND SOCIETY
IN THE EUROPEAN COMMUNITY [1]

organized by the Commission
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PREFACE

In the European Community, as in other regions of the world with a high degree of industrial development, thought is being given to the industrial development objectives which will be conducive to the creation of a society measuring up to the profound aspirations of mankind.

Industry has become the main source of wealth of the advanced nations. It enables the essential and secondary requirements of their citizens to be met, but at the same time its growth raises problems and its benefits are still felt only by part of the world.

In presenting its Memorandum on industrial policy in March 1970, the Commission undertook to amplify and promote the study of the qualitative objectives which should guide the Community's industrial policy.

However, the Commission could not undertake a task of this kind without help. It desired the support of the leading protagonists of the industrial society.

For this reason the Commission thought it worthwhile to organize a conference at which both sides of industry and independent experts could compare their views, with representatives in attendance from the administrations of the present and future Community Member States.

The work centred on 28 reports submitted by industrial, trade union and independent experts; the discussions were of a high quality and there were many speakers.

The success of this meeting, which constitutes a valuable basis for the future work of the European Institutions towards the building of the Community, warrants wide-scale diffusion of the ideas worked out in Venice.

It would have been desirable to include all the contributions, both those of the rapporteurs and those of the speakers in the discussions, in this publication. However, in view of the large number of speakers, it has proved necessary to confine publication to the texts of the reports and the final addresses of the three working party chairmen and the President of the Commission of the European Communities, Mr Sicco Mansholt.

A. SPINELLI

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INTRODUCTION

INTRODUCTORY SPEECH

A. SPINELLI

Your Excellencies, Ladies and Gentlemen,

First of all the Commission would like to thank you for answering its call and coming here to debate the theme "Industry and society in the European Community." This Conference has been called by the Commission to formulate and then carry out, with your help, the industrial objectives of the enlarged Community in the light of the new social needs.

The method we have chosen for the preparation of this Conference has been to ask outstanding individuals from the trade unions, and from industrial employers, together with independent experts to report on the major issues that face European society in the field of industrial policy. In this way we hope to obtain a picture of the major social forces and needs at work in Europe. The rapporteurs have provided us with a rich stock of raw material for our debates. I hope that the discussions will both throw up new ideas and show a considerable degree of consensus on them in such a way as to throw light on and reinforce the action that the Community will have to undertake in the next crucial stage of its development in order to establish a genuine policy to serve society's needs, that is to say an overall policy that gives sense and coherence to all its individual policies.

If the European humanist tradition—the hidden powerful mainspring of the whole Community machine—means anything, it means for us today that economic and industrial development must serve human and social needs and not the other way round. Before speaking about the main themes to be dealt with here, it is necessary, in order to avoid misunderstanding and misinterpretations, to dwell a little on this point. Faced with the real and major dangers which are created by our very development and threaten mankind's future, we are very often told that a halt must be called before it is too late, that it is not right to push development forward at all costs as an end in itself, that we must reorganize our society, in order to impose on it and individuals what is styled in the latest terminology a prudent zero rate of development, a stable and

permanent balance between all its internal and external factors, and all its component parts.

There is a measure of paradox in this heartfelt appeal. Each of the criticisms which it levels against a society based on growth is in general correct, since each individual item of growth, if extrapolated and taken to its logical conclusion, leads to a disastrous negation of itself and of the reasons which motivated it. However, the global solution offered cannot be achieved by man. It does not merely involve consuming only so much and in such a way as to permit a stable and harmonious relationship between consumption and natural resources, between the various sections, structures and classes of society. Nor does it involve simply re-establishing ancient traditions, implanting new ones and making sure that everybody observes them. Above all it means suppressing any further desire for knowledge of what is still unknown, for changing things which may appear inexact or unjust, for the spirit of adventure, be it practical or intellectual, which demands that every time a limit is reached we ask how we can go beyond it. This aim might be achieved by some individual, an epicurean, a monk or a hippy, but not by Mankind.

It may be possible for a people subjected to the totalitarian control of an oppressive élite which has forced it to turn in on itself, to obey inflexible conservative laws and look no further. But it is not possible for mankind as a whole, and European civilization in particular, which came into being and is growing because it has always chosen Ulysses rather than Hesiod, the learning of Galileo and not that of Aristotle, industrial rather than corporate society, freedom rather than complete order, betterment rather than resignation. The alternative has been proposed not only now but countless times in the past and each time it has been rejected by practical rather than doctrinal reality.

Our Community can only be based on the hypothesis of a growing, developing society. It could not be otherwise because the Community itself is an innovatory scheme and innovation is only possible in a growing society.

Basing one's own actions on the hypothesis of growth does not however mean acquiescing lazily and optimistically in it in the illusion that all growth is inherently beneficient. The truth is rather the contrary: even the most beneficient growth tends to become pernicious and destructive in the long run.

All growth, initially surging forth spontaneously and barely under control,

must produce at some time or other a feed-back effect for its own control in order to favour its positive results and eliminate its negative points or at least reduce them to manageable proportions.

It is this rather than checking growth that is the challenge facing the Community, and any advanced industrial country for that matter. It is true that industrial society is growing to a point where it threatens the environment in which we live both as a whole and in its various parts and regions, and even civilized society itself. This menace takes the form of such serious deterioration that the spontaneous efforts of nature and society are becoming more and more incapable of reconstituting what is destroyed. We could reach a point where we no longer possess either the wealth of water, air and earth which we need to survive or towns where we can live and feel like human beings.

The Community must work out for itself a conscious and effective policy towards society to control and channel the interactions of its many parts and the relationships between society and nature, not in order to reach an impossible static equilibrium between society and the environment but to steer the evolution of both so that further progress in the human adventure may be achieved.

This is not a challenge which can be met in the next few years, but in that time we shall have to tackle a number of priority themes which, if they are on the right path towards a solution, will smooth the way for the future development of policy for our society which is becoming ever more complex, and will equip us to cooperate better in the formulation of a developing policy for world society.

What are these major themes, as regards industrial policy in particular?

When the notion of industrial policy first became current in the Community it was conceived as a means of raising productivity and increasing wealth—and with good reason, for the efficient generation of wealth by industry, remains the basis for the improvement of society and for Europe's influence in the world.

The Rome Treaty did not mention industrial policy; it was concerned above all with the removal of barriers to the growth of a common market or, to be more precise, a customs union. The need for an industrial policy emerged where it

became apparent that the purely negative action of removing barriers was not enough and that, if only for economic reasons, more positive common action was needed in the Community to render possible the full integration of European industry and the full exploitation of the new continental dimension. The formation of European companies, the opening of public contracts and effective participation in them, the pooling of technological efforts: all these economic tasks remain an essential part of industrial policy and are crucial if the potential of the enlarged Community is to be achieved.

This Conference must, however, throw light on the wider and deeper tasks and on the responsibilities of the Community and of industrial policy—and also on the new responsibilities of technological policy and on the limits of the restraints which facts and foresight impose on economic growth.

It is universally accepted that ecological needs, for example, impose a first, severe constraint. Patient nature—or the biosphere as the scientists call it— cannot absorb an infinite amount of waste and contamination. So how can the skills of European science and technology be applied in a joint effort to develop new non-contaminating technologies? How can Europe lead in tackling ecological problems that have reached a critical point—like oil pollution of the oceans. The Commission has already made a start with some immediate proposals. But we want you to look much further ahead, to help to clarify ecological policy issues and give them a political impetus. Venice, after all, stands as a symbol of the desperate need for action now if the most precious things in European civilization are to be preserved from the worst side-effects of industrialization. And its plight reminds us that action needs to be supported by financial resources, administrative competence and political power.
Equally, no discussion of future growth and technoloy can ignore the need to assess, explore and conserve Europe's potential resources, and to develop new materials and recycling technologies. How can industry continue to develop without destroying the basis of its future growth? For to sow we must have the proper facilities to safeguard the seed. If growth and its limits remain essential themes, we also need wisdom, guidance and grassroots knowledge on the priorities for spending the wealth the Community produces. Where and how can we find the funds to spend on educational, housing and health needs, on new public transport systems, on further protection of the environment? Concern for a higher quality of life involves the problem of new priorities between public and private consumption, between industrial and public investment.

The "quality of life" is not merely a matter of preserving the stones of Venice, of preventing the Rhine from becoming a poisoned sewer, of saving or replanting forests and making something rational of urban public transport once again, and so on, but of improving the quality of life of the citizens of Europe at their daily workplace and elsewhere. The occasional noise of a supersonic airliner is little compared to the din of a heavy metal cutting tool. Throughout most of Western Europe industrial accidents are responsible for more working days lost than strikes. The frustration of the commuter stuck in his daily traffic jam as he makes his way into London, Paris or Milan is modest beside the imprisoning frustration of work on some assembly lines. In the coming years a major task of industrial policy must therefore be to improve the environment of the workplace and that improvement inevitably involves reorganization of production systems to enrich work and, despite all the difficulties and differences, a growing element of industrial democracy.

Participation, workers' control, *Mitbestimmung*, shared decisionmaking—whatever the differences of words and interests involved, these ideas correspond to a basic human need—both for more shopfloor democracy—for it is at that level that workers of all kinds have most to contribute, and for some democratic participation in the strategic decisions which are taken at the top of our great industrial concerns. Moreover, as industry becomes international and European, neither the need for better conditions nor what I have called the question of "industrial democracy" can be settled at a national level alone. We shall have to explore how both employees' and the public's interest can be better represented in the great multinational enterprises which Europe also needs if it is to continue to achieve its economic and political goals.

A Community advancing towards economic union will likewise have to face new questions about the distribution of wealth between different geographical groups in our society, between privileged and under-privileged regions. That is one of the many reasons why the Community cannot remain an apolitical animal.

I have no hesitation in saying that the wealthier the Community becomes and the more successful our advance towards economic union, the bolder we shall have to be in transferring Community resources to less-favoured regions. We shall not be able to avoid that issue in a Community that will soon include most of the peripheral regions of Western Europe and where—round a central area of regions so overdeveloped that they have already become too congested and in which the quality of life is deteriorating faster than goods grow in abundance—there are others, unduly slighted by nature, where antiquated agricul-

tural methods have not yet given way to a balance between modern industry and agriculture, and regions stricken by industrial changes that do away with old undertakings which are no longer profitable and not bring forth any new ones of promise for the future.

The moral as well as social question of the just redistribution of wealth and the means of producing it is also posed when we discuss Europe and the developing world. Far greater transfers of wealth to developing countries than hitherto, in the form of aid, investments, technological assistance, will be necessary if we are to avoid tragically deepening the gap between us and them. But if this policy is to be successful, and indeed to the extent that it is successful, it will have to be expressed in an increase in the industrial capacity of those countries; we must therefore open our frontiers to their products. The Community has already started on this road, with the unilateral adoption of generalized preferences. But in this way our industrial policy faces a new challenge: since the future division of labour in the world will necessarily be different from the present one, it will be necessary to help the structural changes in various industries so that our own society—and that means particularly working people in certain branches in the textile and electronics industries and in the shipyards and probably yet others in future—do not suffer; the Community has a responsibility to help them either to continue to work in their own, modernized and regenerated industry, or to adapt to new rewarding jobs.

I hope this Conference will not merely define tasks and aims, but will also indicate the instruments for coping with them. May I suggest a few for your consideration.

An effective regional policy needs large Community resources at its disposal through a Regional Fund and a strengthened European Investment Bank and these funds need to be able to be used in active partnership with national and regional bodies for the development of infrastructures but also to be associated with industries—both private and public—for the purpose of promoting the flow of productive investments to the regions that need them most.
The Community needs resources going beyond those of the present Social Fund to carry out what I have called structural industrial policy, above all the adaptation of traditional industries. May I draw your attention in this respect to the provisions of the Treaty establishing the European Coal and Steel Community. There the Community has the right to be informed of investment decisions and common funds are available to help carry out necessary con-

version measures. The reason why the vast process of conversion in the coal industry, which was not in fact foreseen at the time when the ECSC was born, was carried out successfully and without too serious, social, industrial or political upheavals, was that the Community had the means to help in conversion and to smooth the path for those concerned. Could we not, indeed should we not, apply the same principles to industries in difficulties, in need of structural help and change?

The new industries too, above all those with advanced technology, need Community resources in a variety of forms. One form is that of development contracts, on which the Commission is already preparing proposals. There is also a need for more risk capital in Europe to feed forward-looking enterprises of high growth potential, capable of cross-frontier development. There are already various private foundations in these fields, but they need judicious backing with common public funds.

In all these areas the European Investment Bank can be a major focus of growth. It will have to work closely with the national bodies operating in the same fields. As concerns risk capital, I would ask you to consider the idea that the Bank and the parallel national bodies should set up a joint European subsidiary specifically to provide risk capital to enterprises of good growth potential.

The matters you are to consider and the technical equipment you will bring to them presuppose that the Community has the capacity to prepare, adopt and carry out this vast array of measures which is only the beginning of a full-scale policy for society. Since Europe is and wishes to remain a pluralistic society, the realization of this policy, and all the other common policies, depends on cooperation between the Member States, at both central and local administration level. But cooperation alone is not enough; there is a need for common decision making centres which are both efficient and representative. We must ask ourselves whether the present Community institutions are capable of tackling this policy. The answer can only be no.

The Community, as it stands today, was a first step towards the unification of our peoples—a step so important that not one of the countries that joined it have ever turned back or even tried to, in fact others have come in along with them; a step so decisive, that what has been done in the past is now seen as a basis for what remains to be done in the future; a step so binding, that all

future growth must be thought of and brought about as a further extension of *this initial Community*, not as something which can be achieved alongside it and ignoring its existence. However, the Community has always been no more than the first step.

Industrial policy, the mainstay of economic and monetary union and at the service of the ideal of a policy towards society, requires the Community institutions to have quite different decision-making and implementing powers. The Member States must give the Community a mandate to execute the regional, industrial, technological and ecological policies. They must acknowledge that its financial resources, based increasingly, and in a few years exclusively, on citizens' tax contributions, can be raised and developed differently. They must accept that it is the Commission that should clearly be given the initiative in these new fields too and the responsibility for executing the common policies being gradually formed. They must accept that the legislative and financial decisions without which nothing would be possible, must be taken not only by the representatives of the individual governments, i.e. by the Council, but by the European Parliament too, with full powers of co-decision as the sole guarantee of popular consensus and hence European democratic legitimation of any action taken. Finally, they must realize that this is why the time has come to have a Parliament directly elected by the people of Europe.

For many years, the Community has remained unchanged in the form it took on coming into being. There is no doubt that it has completed most of the programme set in the Treaties establishing it but has gone no further. And it has missed not a few opportunities and wasted not a little time. Because of this constitutional inflexibility it has failed in a number of fields; the nuclear policy has been an almost complete failure for lack of a global policy for research and for scientific and technological development; public contracts have not been opened because of the absence of a common industrial policy; the lack of an overall economic policy has caused the agricultural policy to develop abnormally; the customs union and the European organization of agricultural markets have been in danger of destruction because of the lack of a common monetary policy.

However, the long winter is now drawing to a close and the awareness is growing that we must move forward. The Accession Treaties have been signed and will be ratified in the next few months. In October the Heads of State or Government will meet to undertake a political commitment, on behalf of their

countries, to further economic and monetary union and to reshape the system of Community institutions. In the coming months the Commission will formally submit a proposal for institutional reform designed to give the Parliament true legislative, financial and political control. Last August the Community, after some initial confusion, answered the monetary crisis by re-establishing a minimum of monetary solidarity and preparing to strengthen it substantially. At the beginning of next year a new Commission will have to submit to a new Council and a new Parliament the action programme of the new Community. This is the background against which your Conference is being held and which makes it so important, and everything suggests that our thinking and our proposals can provide the guidelines for real actions.



A STATUS REPORT ON WORK IN PROGRESS CONCERNING INDUSTRIAL POLICY WITHIN THE COMMUNITY (*)

R. TOULEMON

The concept of industrial policy is relatively new. For many States it has long been confused with general economic policy or been confined to certain sectors, whose special problems of adaptation or growth provoked intervention by the public authorities.

This was the situation in the Community during the Sixties. Firstly, joint sectorial instruments had been set up and implemented with variable success within the compass of the ECSC and EURATOM Treaties. Secondly, the industrial policy of the Common Market was limited to:
(a) achieving, effectively and positively moreover, the abolition of customs duties on industrial structures,
(b) installing a common customs tariff,
(c) surveillance of aids and restrictive agreements in order to ensure effective competition in the extended market,
(d) examining requests for protective measures from the States in order to deal with temporary sectorial problems.

However, the work begun in 1963 by the Committee for Medium Term Economic Policy had shown the need for overall Community action to enable enterprises to make the most of the existence of the big market, to organize in the scale of the Community economic area and to promote the progress of new technologies, a field where Europe in relation to the United States seemed to be increasingly lagging behind. At the same time some liberation and harmonization towards unifying the European juridical and fiscal framework was taking place, albeit more slowly than the Commission and those involved would have wished. Likewise, the Commission supported by labour organizations, representatives of regions in difficulty and some governments, was striving to mitigate the adverse social and regional aftermath of changes accelerated by the implementation of the Common Market.

Although, strictly speaking, these efforts towards harmonization do not emerge from the sphere of industrial policy, such action of a social or regional nature is obviously of major interest for industry and its development.

In 1969, by the initiative of Mr Colonna di Palliano, the Commission decided to offer a birds-eye view of the problems preceded by an analysis of the industrial situation in the Community, from the standpoint of internal and external communications between firms of different countries.

(*) Translated from the French

So, in March 1970, the Commission sent to the Council a Memorandum on th industrial policy of the Community, in which were brought out five basi guidelines:

(i) Achievement of the single market,
(ii) Unification of the juridical, fiscal and financial framework,
(iii) Approximation of enterprises,
(iv) Organization of changes and adaptations,
(v) Intensification of Community solidarity in economic relations with thir countries.

In the introduction of this paper the Commission recalled the qualitative natur of the end results, to which any economic progress must lead:

(a) Improvements in the conditions and dignity of labour;
(b) Greater participation by the workers in the life of the business;
(c) Instruction adapted more closely to the condition of today's world;
(d) More effective protection of the natural environment;
(e) More harmonious distribution of wealth in the world.

These cares have not waned in importance since then. In March 1970, the Commission had declared its intention of eventually tackling these problems ir depth. Mr Spinelli suggested to the new Commission, inaugurated in July 1970, that a widespread comparison be organized, on the theme of Industry and Society in the EEC, between personalities representing the various social and professional "milieux" together with some leading qualified experts. This constitutes the springboard for the Venice Conference.

Meanwhile without waiting for this conference the Commission has taken the initiative several times in the areas alluded to above, for instance, the Social Memorandum of 17 March 1971 and the initial communiqué of July 1971 concerning environmental policy, which was followed by action proposal from March 1972 onwards. Elsewhere the education ministers within the Council have started to examine together the current problems in teaching and have decided to establish a European Institute of Human Sciences at Venice and are considering setting up a European Education Centre, which would be something like a common study office for teaching problems.

But the subject of this report is, *stricto sensu*, a status report on the work being done on industrial policy. Before outlining the situation concerning each of the basic guidelines in the Memorandum of 1970, I would like to give members of the conference some information about the procedures followed by the Council.

On the basis of the 1970 Memorandum and in addition of several papers worked out by the French, German and Italian governments, the Council resolved, in July 1970, to assign the investigation of nine problems regarded as priorities to a group of senior civil servants, who report to the Committee of Permanent Representatives. These nine items revealing the thoughts uppermost in the minds of governments are:

1. the realization of the common market in certain sectors of advanced technology and capital goods;
2. the promotion of industrial progress and technological development in the Community;
3. measures which may facilitate trans-national industrial regrouping within the Community:
   (a) establishing a Community advisory bureau for industrialists wishing to pursue approximation,
   (b) extension of the role of the EIB,
   (c) issuing of procedures for concerted action at Community level on problems of industrial restructurization;
4. development of Community fellowship with an eye to improving technological cooperation with non-Member States;
5. unification between Member States in the face of foreign investments;
6. the possibility of establishing, in addition to the juridical protocol of European commercial companies, a more flexible protocol which will facilitate approximations between enterprises
7. the territorial aspects of industrial policy;
8. the coordination and rationalization of Community financial devices intended for economic development,
9. the role of public enterprises in the industrial policy of the Community.

After nine months work, the group has submitted its report, which indicates a broad measure of agreement, although some divergences, chiefly over public contracts and investments by non-Member States, have not been entirely reconciled. The group proposed to set up a standing Committee to follow through this concerted action on industrial policy. The Committee of Permanent Representatives, whose agenda throughout 1971 has been overloaded by the accession negotiations, will not be able to report to the Council until March 1972, or one year after submission of the report by the Senior Civil Servants. This will be after a new reconciliation of viewpoints, although disagreement still persists as to the status to be accorded to the Standing Committee on Industrial Policy (seconded simultaneously to the Commission and the Council or the Council Group).

While taking an active part in the deliberations of the Senior Civil Servants, the Commission has carried on its work in accordance with the outlines laid down in its Memorandum. It also carefully considered the common guidelines brought out in the debates of the Council of Senior Civil Servants and Permanent Representatives, as well as the official views of the European Parliament, the Economic and Social Committee and the attitudes emanating from consultation with professional and trade union organizations.

The current status of the situation can be described by following the guiding priciples of the 1970 Memorandum, to which we should add environmental protection.

of joint or grouped orders, inducement for the different industries of the Community to cooperate.

This concerted action on purchasing policies of public interest is presently the subject of in-depth discussions among various Community and national authorities.

Following a resolution by the Council of Transport Ministers, the railway companies have already put in hand a collective study of these problems and intend to continue their effort towards standardization and joint purchasing. The Commission is involved in promoting a similar cooperation between electrical or aviation companies and between the various administrations of the PTT and is hoping, in these areas, for a political commitment on the part of the Council. The Commission is handling a continuous study of the situation and will shortly publish an initial report on the obstacles still blocking the open access of enterprises to the public works contracts of the Member States.

II—Standardization of the juridical, fiscal and financial framework, and the re-grouping of enterprises across frontiers

The completion of the Common Market involves not only the elimination of the remaining obstacles blocking trade, but the final realization of the right of establishment, the harmonization of taxation systems, initiated by the overall adoption of the Added Value Tax and the opening of the common market for capital, in itself tied in with progress towards the monetary union.

In this sphere the realization of the Economic and Monetary Union plays a decisive role. On its principle must turn the harmonization of fiscal systems and the freedom of movement of capital within the Common Market. The Union will allow us to ensure the stability of rates of exchange, without which a Customs Union loses its essential value, which consists of maximum security for the development of manufactures suited to the needs of a big market, where an undistorted competition prevails.

The recent decisions taken by the Co[illegible] then be greeted with satisfaction, since they mark the unanimou[illegible] of the Member States on the guidelines and measures, which sh[illegible], fiscal and financial framework better fitted to [illegible] Am[illegible] e modest measures but nonetheless of real v[illegible] taken based on Art. 54. 3g. towards co[illegible] within Member S[illegible] from companies in c[illegible] as well [illegible]es. In particular a [illegible] for the [illegible]val, which cov[illegible] ac- co[illegible] nt reports to [illegible] pub[illegible] ents relative [illegible]

the limited liability company. This coordination is a necessary step towards ensuring the opening up of capital markets within the Community.

The Memorandum on industrial policy had highlighted the interest in "restructurizing" enterprises, especially when the operations extend beyond frontiers. The reactions to the Memorandum in this field merit a few additional comments on my part. First of all a misunderstanding must be cleared up.

Many industrialists are astounded that the Commission is striving to check restrictive agreements and dominant situations and promote concentration at the same time.

Some industrialists believe they see here a paradox, which reflects the differing concepts inspiring the departments responsible for competition on the one hand and those responsible for industrial policy on the other.
In reality these two objectives, concentration and competition, far from being antagonistic are in fact complementary. Especially in the sectors of advanced technology, the creation of competition undistorted by considerations of national prestige turns on the formation of trans-national consortia. This is why, in these sectors, a distinct preference must be indicated in favour of trans-national concentration or cooperation as against nationally bounded concentration. Certainly the latter can be a useful phase especially in countries with weak or scattered industrial structures. But it should never lead to the formation of a single national company, otherwise there would be a grave danger of consolidating national compartmentalization

Moreover, it must be made clear, that the Commission does not advocate concentration everywhere. On the contrary, it is convinced, that except for certain fields where technique entails large dimensions, the smaller-sized firms will hold on to their opportunities. No more than it favours concentration, the Community is not in itself a catalyst of industrial giantism. On the contrary it is the medium-sized firms which draw and will draw the most advantage from Community works, inasmuch that it is the big firms who adapt themselves better than the small ones to the host of fiscal and administrative anomalies, that is if they cannot derive advantages from them.

Apart from the adjustments which it has already made to the regulations on restrictive agreements, the Commission has proposed numerous measures to facilitate trans-national concentrations and cooperation: directives intended to eliminate fiscal discrimination falling on international mergers or adjusted to the fiscal status of parent and subsidiary companies, together with the harmonization of company law and plans for European status in respect of shareholding.

According to industrialists the fiscal obstacles are the most awkward ones in the case of mergers, participations or creation of subsidiaries. This is why, in January 1969, the Commission submitted two proposals for directives con-

ceptional interest on the European scale. In the last case, the statut joint enterprises, as opposed to European *Sociétés anonymes*, would a association of companies other than *Sociétés anonymes*.

Moreover, the statute on joint enterprises could be matched with the grar certain juridical, excise and fiscal benefits. The Community could share in financing of the joint enterprise, by subscription of capital, subsidies or lc The Council would decide unanimously, case by case, on proposals by Commission, which should suffice to avoid any risk of abuse. There woul no question of granting discriminatory advantages to joint companies would be carrying on their activity in a competitive sector.

The question of granting benefits or extra inducements to encourage coop tion over frontiers has been broadly discussed in the Community. Shoul preferential fiscal system or loans with interest advantages be provided for type of operation? Should an IRC for Europe be set up?[1] Up to now non these suggestions has been retained by the Commission. The Commission simply asked the European Investment Bank to direct more attention to projects emanating from the cooperation between various Member States.

Furthermore all the Member States have deemed it necessary to study the pc bility of setting at Community level a bureau for approximation of en prises. This office, which could represent a service seconded to the Commiss or spring from the professional organizations involved, would have the jot answering requests for information from enterprises wishing to engage multinational cooperation, and the task of marrying, in a neutral way, offers and requests for cooperation submitted to it. A decision on the creat of this office should come up soon. Up to now the balance sheet on the Cc munity's actions towards encouraging approximation among enterprises can be regarded as satisfactory. Private financial organizations have indisputa displayed much greater initiative in this sphere. Likewise industrialists resp sible for executing these transactions have escalated their efforts. But the Co munity regulations in the fiscal or juridical sphere, which would have facilita decisive progress in the interpenetration of industrial structures, are still pe ing. It is becoming increasingly clear that fiscal harmonization and the formu tion of European company law will only limp forward, unless the Commun does not make solid progress towards political union.

III—Organizing changes and adaptations

The Commission has constantly emphasized the need for continual econor development, evolution and modernization of the industrial engine. The Co

[1] British Industial Reorganization Corporation, abolished in 1971.

mission is fully aware of the seriousness of the economic, social and regional problems posed by these changes. In its 1970 Memorandum, the Commission has insisted on a certain number of actions, which it thought were essential for preparing and facilitating these changes: forecasts (especially in the case of employment prospects), sectorial action, regional and social policies being the most important.

In global and especially sectorial forecasts, little progress has been made by the Community in recent years. Insufficient and uneven statistics in our countries have brought about this situation. Improvement of statistical bases and forecasting techniques remain an urgent task for the competent institutes and agencies of the Community. The Commission continued working out the provisions devolving on it by virtue of the European Treaties: in 1971 the general objectives covering steel for 1971-1975 were adopted. The formulation of the second Euratom programme (1975-1980) will be finalized in 1972.

Within the scale of this report, it is difficult to outline even summarily, all the sectorial proceedings pursued by the Commission in close collaboration with the professional "milieux" involved. It is enough to recall that the efforts have a twofold objective; to improve the national sectorial policies and administrate knowledgeably the instruments provided by the treaties.

In the sectors involved in problems of changes or promotion, the Commission, in recent years, has undertaken in-depth analyses and proposed common guidelines to the Council. This has applied to shipbuilding, paper, the electromechanical industry, textiles and numerical machine tools. Work is in progress on non-ferrous metals, electronics and aeronautics.

All the European Treaties involve a series of measures or instruments influencing more or less directly the development of industrial sectors: regulation of the market, supply policy, financial instruments, commercial policy arrangements and the control of national aids are the most important ones. Their implementation, especially in the case of commercial policy, has set off closely concerted action between the industries and trade unions concerning the objectives to be reached and on the necessary techniques for success. I think it also worthwhile to recall that in the decisions on sectorial aid, the Commission took its inspiration from four principles:

(i) Aid must be selectively granted and only to enterprises or manufactures with a future and which will be able to face competition effectively;
(ii) Aid must be temporary and non-progressive so as not to perpetuate an artificial situation. It must stimulate the dynamism of economic agents;
(iii) Aid must be as straightforward as possible so that enterprises can appreciate and evaluate it easily and so that costs and results can be measured;
(iv) Lastly, aid must be tailored to the objectives in view and have the least possible ill effect on inter-Community competition and trade.

The current transformation of industrial structures involves very important changes in the employment conditions for labour. Progress in productivity releases hundreds of thousands of workers in some sectors, while new jobs are created in others. Globally up to 1971, the Community has suffered from a dearth rather than a glut of labour and current slackness does not seem likely to modify the situation other than temporarily. But due to the still insufficient mobility of labour and inappropriate localization of investments, painful problems over employment have arisen in certain mining or old industrial zones. At the same time the underindustrialized regions of the Community like the south of Italy and the west of France were far from sufficiently benefiting from the general expansion. This kind of imbalance, which has obliged many workers to leave their homeland, does not involve only serious social disadvantages, but also slows up the economic development of the Community. These changes call for close attention. The Community will have to organize them and seek solutions beforehand, which will fit both the needs of men and the requirements of industrial progress, which are sometimes much more contradictory than one may imagine.

This is why the creation of the Permanent Committee on Employment and the reform of the European Social Fund resolved by the Council in 1971 constitute two cardinally important decisions from the standpoint of industrial policy. The new Social Fund will have at its disposal in the next few years increased funds reaching, in the estimation of the Commission, 250 million units of account per annum from 1975 onwards as against 55 million today. The Fund should thus be able to promote the professional training and regrouping of workers and in this way facilitate these vital changes as the ECSC very successfully accomplished in the coal and steel industries.
The action of the Fund should be accompanied by an intensive regional policy called for not only by Italy but also by Great Britain, Norway and Ireland. The Commission proposed that the Community budget should contribute to encouraging regional development by the intervention of the EAGGF and by allowances on interest, which would be a useful complement to the already important action by the European Investment Bank. A decision by the Commission has just been interposed concerning the new regional role of the EAGGF.

Maximum emphasis on the mobility of labour and encouragement for the creation of jobs, where labour is available to minimize geographical mobility, represent joint objectives of the industrial, social and regional policies, which the Commission intends to promote within an overall concept allowing for the basic aim of European workers to find work in their home region.

These thoughts on the changes in our industrial economies also offer the opportunity to recall certain questions, which have already been deeply considered in the Community institutions.

The first concerns foreign investments. These investments, especially when they

are aimed towards creating new activities, form a valuable contribution to the industrial expansion of the Community. Their attraction for regional development or technological progress has induced governments to often welcome them with favourable conditions. But these advantages must stay within the bounds, which can guarantee a healthy competition between investments by Community enterprises and those from foreign parts and not provoke detrimental discrimination against Community enterprises. Likewise these investments, which are often made by the very large enterprises must not involve abuse of a dominant position.

The importance of the role played by public enterprises in the modernization of industry and in the development of regions no longer needs proof. Their weight varies from one Member State to another. But in each case their contribution towards a happy evolution of industry can be decisive. In its frequent exchanges of views with these enterprises, the Commission takes care to see that their role, which is to serve general interests, is registered in the objectives of the Community. Moreover, when the activity of these enterprises takes place in the competitive sector, the Commission must ensure that they do not benefit from any special advantages.

In an industrial economy undergoing basic changes, it is justifiable to attend to the particular problems incurred by the small and average size enterprises during this evolution. No more than the big ones, the enterprises of more modest size cannot escape from the need for restructurization, redevelopment and evolution of their proportions and production. Sometimes less prepared or less well armed than the big industrial units for tackling these changes, the small and medium enterprises may need some assistance from public authorities, assistance all the more legitimate in that these enterprises are an essential ingredient in the industrial sector. In many fields of activity their contribution to the economy is irreplaceable. Their role in the process of innovation is cardinal. So the Community, while implementing its second medium term programme of economic policy, is also considering action for cooperation, financing and technico-administrative assistance for the benefit of those enterprises.

Finally it is impossible to bring up the problems of change and modernization without pausing a moment to consider management. The Community betrays a certain delay here, which only a coordination of current efforts in the European countries might make up. This was the meaning of the official stance of the Commission in its Memorandum on industrial policy, which advocates setting up a European Foundation for management and training.

Recent initiative has provided some answers to these problems. In 1971, the European Management Foundation was established, which brings together the various institutes and organs for cooperation existing in this domain within the European countries. The role of the Foundation is to improve the quality of

teaching and research in management in consideration of the economic, social and cultural context of Europe.

The Foundation has to bring its aid to bear on the development of teaching and research institutes within European countries, on the development of training for teachers and researchers in managements, on the strong encouragement of contact between teachers and researchers, enterprises and administrations, and on the definition of needs and means to meet them.

Moreover, the European Institute of Research and Advanced Studies was recently established in Brussels, whose function is to ensure, on a multinational basis, the training of teachers for Europe at a high scientific level.

With the Institute for Technological Management set up in Milan by some of the member countries of the OECD, and the International Institute of Management of Berlin, also international, whose activity bears on management research, Europe has strengthened its future means for executive training in this sphere.

IV—Scientific and technological policy

At the beginning of 1972, a scientific and technological policy for the Community is still only a hope. The serious difficulties besetting Euratom and the too limited results for the PREST and COST groups could provoke scepticism. The need for an overall Community policy in this field is only more obvious. This joint policy does not necessarily mean joint action or joint financing by the Community. A joint policy is obligatory first of all to define economic, social, political—even military objectives—for research in order to take stock of the means disposable in staff, laboratories and money in order to fix the priorities and define the instruments best suited. One should distinguish between the basic, fundamental research, where coordination is sometimes futile, sometimes desirable, sometimes indispensable (the big instruments) and the technological and industrial development which must make room for competition and meet the needs of the market. At this level scientific, technological and industrial policies are so inextricable mixed, that it is impossible to genuinely coordinate or jointly implement one of them without a minimum of agreement or cooperation on the others. After laborious efforts in internal reorganization and external consultation, the Commission is ready to draw on the lessons from the past (the failures and successes of the PREST and COST groups) and submit to the Council new proposals, which, if accepted, will serve as the foundations of a common European strategy for scientific and technological development.

We shall confine ourselves here to summarizing the features directly related to industrial policy.

The first concerns the definition of end results and the aims of scientific and technological efforts. Only an effort towards definition, whose difficulty should not be underestimated, can facilitate the direction of a policy and the judgements in arbitrations incurred by the excess of projects over the means available. Even the richest nations, like the United States, are obliged to resort to such arbitrations. The joint definition of objectives in the Community and at least in some of the areas, appears to be the necessary point of departure of a Community scientific and technological policy. Only if the choices are jointly made will agreement be reached on the sharing of tasks and cooperation To define these end results and objectives the Commission has proposed to establish a permanent enclave for ideas and suggestions in the form of a European Research and Development Committee, made up of independent high-level experts, whose task will be to enlighten the Commission and Council on the choice of objectives and priorities.

The second feature concerns the implementation of a joint research policy at Community level: to compare and coordinate programmes of national research in order to arrive at a better distribution of tasks and concerted action. The development of joint European research programmes, possibly supported by a European Science Foundation, the joint creation of massive instruments of research and exchanges of knowledge and researchers would be the essential tools of this policy, whose first fruits had been outlined and proposed by the PREST group, but which have not yet been tried out.

Action towards technological promotion is a third feature. Is such action necessary and efficacious? Are not competition and industrial dynamism the most effective driving force behind innovation? However vehement the debate may be on these points, all the industrial states and especially the Member States do not promote any the less some of the developments of their industries in the major technologies (atomics, aviation, data processing) and in the minor (food, textile and mechanical industries). Should not the means utilized at the national level be applied at the Community level for cooperative operations? And would not these means be more effective if they were pooled for the whole Community rather than scattered over national transactions? One of the difficulties in answering these queries is that the promotion of technology, in order to be effective, cannot be confined to support of Research-Development, but must also bear on the market which must in some cases be stimulated or even created, and on industrial structures, which must usually be strengthened in order to exploit innovation. Put another way, American aeronautical development springs more from military and civil demand and from the existence of Boeing than to the aid granted for a project of specific aeronautical development. This is why the Commission has insisted vis-à-vis the governments, that action be taken at the three levels of development, markets and industrial structures.

On the plane of development the Commission has recommended systematic research on inter-Community cooperation financed or not by the Community. In the case of major technology, inter-government agreements seem today to be in the best position to solve the difficult financial, technological and sometimes political problems posed by the direction of very large projects. On the other hand, in the case of standard technology which does not raise the same problems and where concerted action has been disappointing, the Commission has proposed the establishment of Community development contracts for industry, which would afford partial support by subsidies re-imbursable against success, to the operations in technological cooperation between enterprises of different Member States. These projects could be placed in spheres of general public interest (in the campaign against "nuisances" in health or transport) or they could be concerned with the development of new products or new production processes. In the last case the initiative would revert to the industrialists. The granting of this aid, which would bridge a particularly deplorable gap, should follow a rapid and flexible procedure. Among the criteria to be considered should be the contribution by the projects towards the permanent creation of jobs in regions up against special problems in this area. A formal proposition on this matter should soon be made by the Commission.

On the plane of markets the Commission, taking up a suggestion by the French Government, has proposed a pooling of public or near public purchasing policies to eliminate the technical compartmentalization of markets within the Community and to encourage the penetration of new products (telecommunications, data processing, aeronautics, infrastructure equipment etc.). This suggestion is under study.

The different proceedings which we have just brought to mind should encourage approximation by enterprises and the necessary restructurizations. The development of the appropriate juridical instruments should be matched by an evolution in the attitude of governments towards accepting an increasing mutual interdependence in advanced technology. Thus competition over policy or prestige would give way to technical and economic competition.

Lastly as the fourth feature, the cooperation between certain national public services or the creation of joint public services within the Community could constitute an essential ingredient of a joint scientific and technological policy and facilitate the satisfaction of new needs at minimum cost.

The extension of the statute for the joint enterprise Euratom discussed earlier would allow the creation of such joint services.

In these various areas the enlargement of the Community should provide a decisive impetus. The technological ties existing already or about to be formed between old and new members represent the best earnest of scientific and technological cooperation within the "Ten".

V—The environment

On 22 July 1971, the Commission issued a First Communication on Community policy concerning environment. In this document the Commission stressed that the fight against the degradation of nature and all strata of life should henceforward be featured among the economic and social aims of the Community. Moreover, the Commission noted that the provisions made by the Member States in this field could have serious consequences for the working of the Common Market and on the unity of the European economic area. Having recalled the activities already underway on behalf of the Communities for the improvement and protection of the environment, the Commission proposed some new approaches which should be implemented as soon as possible.

This initial communication was followed by an action plan for the European Communities concerning environment, which the Commission has just proposed to the Council of Ministers.

The plan provides firstly for the establishment of a common framework for evaluation, action and, if necessary, directives, to which the Community, the Member States and local administrations can always refer. To this end, it is proposed to set up an objective basis for the evaluation of pollution dangers to human health and the environment, to establish common health standards and to define joint objectives concerning the quality of the environment.

The follow-up after the application of these norms and objectives concerning sources of pollution (products or economic activity) and the special measures to be taken in certain areas of common interest and against certain polluting substances should be decided jointly. As a particular case, the Commission recommends setting up a European agency for the Rhine basin, which could be given the status of a joint enterprise.

Secondly, in order to combine national efforts and the sound progress of work undertaken at the Community level, the Commission proposes to set up a common information procedure foreseeing possible extension to the whole Community of emergency measures for environment.

Thirdly, to allow the Community to share actively in the work of international environmental organizations in such a way that the specific requirements of Europe are considered, the Commission suggests that the Member States get together and take joint action concerning environment within the compass of these organizations.

Lastly, the Commission recommends proceedings for developing scientific and technical knowledge in the sphere of environmental protection and improving the collation and circulation of knowledge within the Community.

These are, in brief, the indispensable measures which the Community should adopt if it intends to conduct a coherent and dynamic policy on environment. There is no question, and the Commission does not suggest it, of transferring to the Community level, the bulk of the policies and action that the Member States have already adopted or are going to take up. But within an economic union it seems necessary to make available a common basis for regulations, at least for some sectors and certain products, in order to ensure a more effective protection of mankind and nature and to avoid the occurrence of technical obstructions and distortions of competition.

VI—The intensification of Community solidarity in relations with non-Member States

Since the presentation of the Memorandum on industrial policy, the negotiations on the accession of four new members to the Community have reached a happy conclusion. In its enlarged form the Community will consolidate its position as a prime commercial power in the world. Its responsibilities in regard to its industrialized partners, countries with nationalized trade, and especially developing nations, are greater than ever, whilst the difficulty in adopting common attitudes to different problems grows correspondingly with the number of Member States and the variety of their economic problems.

During recent months, the economic and monetary events which have shaken the world have allowed the Community, despite these temporary problems, to prove that it was sufficiently mature to carry out such a task in full consideration of the general interest. Indeed the risk of escalating protectionism was great. It still is. Such retrograde action would greatly prejudice the economies of industrialized countries. It would have very serious repercussions in the developing countries. In these circumstances the Community resisted the temptation of taking or even considering retaliatory measures. It has even accepted certain concessions without return in consideration of the difficulties facing the United States. In doing so the Community has played the stabilizing rôle expected of it.

This trend will soon be confirmed by the accession, as associates, of a group of States formerly linked to some of the applicant countries.

In the same spirit the Community is negotiating with non-applicant members of EFTA in order to reach agreements which will not prejudice their economies but strengthen the commercial ties between them and the Community despite the absence of common economic policies.

However, the fellowship of the Six, and later the Ten, will have to be shown not only in the multilateral and bilateral negotiations of 1973, within the framework of GATT, but also at the Conference on European Security and Cooperation. The Soviet Union especially should be persuaded to recognize

her interest in recognizing the Community and cooperating with it, without the Community affording any guarantee whatsoever to the politico-economic protectorate, which still persists in eastern Europe.

On should also examine the desirability of replacing the so-called auto-limiting agreements, which have arisen in some sectors, by a code of "good conduct", which would help to reduce the cyclic swings by diminishing the risk of obstructions to international trade. Such provisions would be specially valuable in the steel sector, where the market is subject to pronounced cyclic ups and downs injurious not only to the iron and steel enterprises but also to the whole economy.

The activation of a joint commercial policy cannot ignore the problems incurred by the development of multinational companies. The activity of these companies has contributed a great deal to the progress and expansion of the Community economy. But the Commission, careful to forestall any abuse of a dominant position, is studying measures which should be considered, if need be, in order to ensure that the behaviour of these companies still conforms with the basic interests of the Community.

The Commission is also taking care that the Community enterprises have similar facilities for their investments in non-Member countries.

The recent monetary crisis and the persistent deficit in the balance of payments of the United States have given a new edge to the problem of foreign investments. It may seem abnormal that the Community is holding on to considerable amounts of unconvertible dollars, whereas at the same time the American companies continue to invest in Europe, while Community companies invest much less in the United States. Among the criticisms provoked by this situation, that by American trade unions is by no means the least sharp.

If this situation was to persist, it would certainly lead to controlling measures on one side and protectionist devices on the other. We may also hope that steps will be taken on both sides of the Atlantic, so that, partially at least, dollar balances may be invested in America and thus share in reestablishing a mutually desired balance.

A more specific problem is assuming proportions which may well cause apprehension, namely the question of export credits.

Despite the efforts of the Bern Union, the Community coordination group and the OECD, credit periods everywhere are getting longer and longer and the allowances agreed on interest rates are continuously rising. This is an undesirable situation both for the importing countries, whose debts reach the point where the country's reimbursements will be beyond its capacity, and for

the exporting countries, who have to pay from their own pockets for what they produce and supply other customers.

Obviously the nature of the problem varies according to whether the exports are shipped to industrialized countries, State organized economies or developing nations.

For exports to developing countries the problem is especially complicated, since the way in which the concept of aid is allied to that of commercial transactions is still not easily defined. This explains why, in the Community just as in larger spheres, the efforts towards setting up rules clear and acceptable to everyone are especially arduous.

On the other hand, credit for exports to developed countries and those with State organized commerce involves relatively simpler problems. Besides the agreements to be encouraged within the OECD and in anticipation of the Conference on Security and Cooperation in Europe, a common approach at the level of the Ten should be made. With this in mind the Commission is preparing a draft regulation, which could soon be submitted for the Council's approval.

As regards the harmonization of credit insurance procedures, the two policies covering medium and long term suppliers credit, one for private and one for public buyers, have been adopted by the Council in 1970. Their implementation, however, was subject to the solution of several related problems including the adoption of a common policy for purchase credits, a common scale of premiums and joint mechanisms on price and trade guarantees. The Commission made proposals, notably on the last two points, during the summer of 1971. However, the study being undertaken by the different Council authorities shows that on some matters, particularly the question of price guarantees, it will be difficult to reach rapid agreement. The Commission has also just taken up a directive which will modify the application conditions of the two policies adopted by the Council in 1970, so that they may be applied this year.

Lastly, as regards research, the work by the PREST and COST groups will allow some international cooperation to get underway. If such an approach is accepted as a first stage, one must not shut one's eyes to the fact that it excludes any organized Community solidarity, and will not have any real significance unless it paves the way for the development of a global strategy.

Conclusion

In sum, reviewing the whole problem of Community industrial policy leaves a patchy impression. Those who are optimistically inclined will emphasize the progress made in abolishing obstacles to trade: in shortly opening up the public

works contracts, in greatly increasing international approximations. They will stress also the advances made towards initial agreements in research with the trend towards setting up European technological services, to which may be added the creation of the European Management Foundation and the Institutes in Brussels and Milan, not to mention the favourable reception of the Commission's proposals on environment. Those with a more gloomy turn of mind will lament the slowness of the Council's procedures, the number of proposals still on its agenda awaiting decisions, the tendency of some Member States to dispute the initiating and coordinating role of the Commission, the very slow pace of work in the scientific and technological fields proceeding on a far too broad extra-Community basis, the lack in many areas of any meaningful solidarity between Member States in their relations with non-members.

Perhaps the most reassuring thing is the fact that the Conference of Heads of State and Governments to be held in October, has included industrial and technological policy and the institutional strengthening of the Community in its agenda. It is also satisfying to note the keen interest shown by the future members and more especially Great Britain in this side of the Community's activities.

This was therefore a well chosen time to draw up an initial balance sheet and outline some of the prospects.

In any discussion on the future of industrial policy one must note that despite twenty years work by the ECSC, and then by the EEC and Euratom, towards industrial growth, economic prosperity and social wellbeing considered in terms of income have been attained beyond all expectations, huge problems still remain unsolved, which vitally affect not only the happiness of Europeans but also to some extent the future of our civilization.

The new era heralded by the assession of the new members must be marked by a great effort to forestall the imminent rupture between industry and society and furthermore between the generations. To put industry at the service of mankind: that is really the European Challenge. Today only western Europe can show the way for a world more than ever torn with doubt. Western Europe has managed to preserve freedoms which are the envy of the Eastern bloc. She remains less affected by the social plagues of the post-industrial era hitting the United States and Japan. She has forged bonds of friendship and close cooperation with Africa. Her initial steps towards unity have provided a new dynamism. Thus western Europe seems capable of contributing to peaceful, logical and systematic progress both in her own interest and that of other peoples.

The powerful social forces represented at this conference should become truly aware of Europe's new opportunities and her new responsibilities.

To reconcile industry and society means first liberating the industrial worker from the evil spells still binding him; not only material squalor, which is still with us, but the moral poverty bred by monotonous jobs, the ever faster rhythm, conveyor-belt work, the inconveniences of transport, the harmful effects of city life and above all the lack of standing.

This means providing work for men near their birthplace and where their forefathers lived. Europe must not turn into a Far West of rootless people nor a melting pot drowning national and regional characteristics.

It means an economy directed more towards fulfilling the basic human aspirations: comfort and security at home, attractive towns to live in, a safeguarded countryside within reach, freely diffused culture unwarped by snobbery or "élitisme".

It means a Europe economically open to the world but running its own ship, its influence based not only on an incomparable heritage but also on the efficiency of its productive apparatus and its institutions.

And lastly it means a Europe relying on its own capabilities and devoting its new powers towards a more equitable distribution of wealth, the bringing together of peoples and the organization of peace.

These are the themes of the conference opening today at Venice. These are the tasks awaiting the Community.

INTRA- AND EXTRA-COMMUNITY TRADE 1958 and 1969

($ millions)

	EXPORTS						IMPORTS					
	1958			1969			1958			1969		
Country	Total	"Intra"	"Extra"	Total	"Intra"	"Extra"	Total	"Intra"	"Extra"	Total	"Intra"	"Extra"
West Germany	8 807	2 406	6 401	29 052	11 571	17 481	7 361	1 896	5 465	24 926	10 862	14 064
France	5 121	1 136	3 985	14 880	7 118	7 762	5 609	1 227	4 382	17 222	8 690	8 532
Italy	2 577	608	1 969	11 729	4 938	6 791	3 216	687	2 529	12 450	4 818	7 632
Netherlands	3 217	1 337	1 880	9 965	5 992	3 973	3 625	1 518	2 107	10 991	6 250	4 741
Belgium / Luxembourg	3 053	1 377	1 676	10 069	6 795	3 274	3 136	1 462	1 674	9 984	5 732	4 252
EEC	22 775	6 864	15 911	75 696	36 460	39 236	22 946	6 790	16 156	75 572	36 330	39 242
Britain	9 276	1 286	7 990	16 894	3 366	13 528	10 488	1 492	8 996	19 956	3 839	16 117
Denmark	1 267	395	872	2 958	681	2 277	1 359	484	875	3 800	1 275	18 642
Norway	743	202	541	2 203	561	1 642	1 309	463	846	2 943	792	2 151
USA	17 751	2 428	15 323	37 444	6 669	30 775	13 208	1 657	11 551	36 052	5 800	30 252
Japan	2 887	124	2 763	15 990	968	15 022	3 033	149	2 884	15 024	821	14 203

Source: SOEC Basic statistics of the Community.

Gross value added at factor cost in manufacturing industry

	1969				1970			
	Gross value added at factor cost		Total employed (thousands)	Value added at factor cost per employee %	Gross value added at factor cost		Total employed (thousands)	Value added at factor cost per employee %
	in national currency	in $ million			in national currency	in $ million		
West Germany	DM 211 030 mill.	53 581	10 222	5.242	DM 245 870 mill.	67 178	10 511	6.391
France	.	.	.	.	.	.	.	.
Italy	Lit 12 746 000 mill.	20 394	5 802	3.515	Lit 14 901 000 mill.	23 842	5 957	4.002
Netherlands	.	.	1 308	.	.	.	1 318	.
Belgium[1]	Fb 304 600 mill.	6 092	1 205	5.056	Fb 341 700 mill.	6 834	1 232	5.547
Luxembourg	Flbg 18 431 mill.	369	.	.	.	.	.	.
Britain	£ 13 220 mill.	31 728	9 065	3.500	£ 14 551 mill.	34 922	9 053	3.858
USA	$ 237 300 mill.	237 300	20 577	11.532	$ 234 200 mill.	234 200	19 741	11.864
Japan	.	.	.	.	.	.	.	.
Ireland	.	.	.	.	.	.	.	.
Norway	Nkr 17 331 mill.	2 426	3 889	6.237	Nkr 19 630 mill.	2 748	400	6.870
Denmark[2]	Dkr 28 375 mill.	3 783	601	6.295	Dkr 31 580 mill.	4 211	.	.

[1] Excluding garages.
[2] Including repairs, maintenance and charges on land and buildings.

Wages and salaries in manufacturing industry

	1969				1970			
	Total wages and salaries paid		Total employed (thousands)	Wages and salaries paid per employee %	Total wages and salaries paid		Total employed (thousands)	Wages and salaries paid per employee %
	in national currency	in $ million			in national currency	in $ million		
West Germany	Dm 130 070 mill.	33 025	10 222	3.231	DM 155 180 mill.	42 399	10 511	4 034
France	.	.	.		.	.	.	.
Italy	Lit 8 097 000 mill.	12 955	5 802	2.233	Lit 9 972 000 mill.	15 955	5 957	2.678
Netherlands	.	.	1 308	.	.	.	1 318	.
Belgium	.		1 205	.	.	.	1 232	.
Luxembourg		.		.	.	.	.	.
Britain	£ 9 504 mill.	22 810	9 065	2.516	£ 10 673 mill.	25 615	9 053	2.829
USA	$ 180 112 mill.	180 112	20 577	8.753	$ 181 654 mill.	181 654	19 741	9.202
Japan	.	.	.	.	.	.	.	.
Ireland	.	.	.	.	.	.	.	.
Norway	Nkr 10 896 mill.	1 525	3 819	3.920	.	.	400	.
Denmark	.	.	.	.	.	.	.	.

Overall indices of industrial production (excluding buildings) 1958 = 100

	1958	1962	1965	1966	1967	1968	1969
West Germany	100	133	156	159	156	174	197
France	100	122	140	149	153	158	178
Italy	100	148	167	186	203	216	221
Netherlands	100	134	163	173	182	201	225
Belgium	100	126	147	151	153	162	178
Luxembourg	100	113	125	120	122	127	144
EEC	100	130	152	160	162	175	195
Britain	100	114	132	135	135	143	148
Norway	100	125	153	159	166	174	182
Denmark	100	138	166	159	166	174	182
USA	100	127	153	168	169	177	185
Japan	100	191	255	289	345	404	472

Source: Basic statistics of the Community 1958/1969 and 1970.

PART I

Industrial Development and the Reduction of Social and Regional Disparities

(Group 1)

INDUSTRIAL DEVELOPMENT OF THE COMMUNITY

PROBLEMS AND PERSPECTIVES

by

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INDUSTRIAL DEVELOPMENT OF THE EEC: PROBLEMS AND PERSPECTIVES (*)

R. LOMBARDI

Premise

Twenty-seven years ago, almost to the day, the Second World conflict came to a close. The end of the war found European countries in a state of exhaustion, civil structures almost non-existent, factories destroyed. One had to start from nothing and the will for restarting seemed stifled by a crisis of discouragement and mistrust. A large portion of the population was still suffering from the recent events with an attitude of resignation, of indifference, of passive protest: "Ohne uns"; "without us".

The rapid succession and multiplicity of events, the new problems arising which today's society denounces, make that epoch seem far away; however, they cannot make one forget the constructive ability which industry, above all, responded and reacted to this feeling of bewilderment. If I dwell on this topic, recalling briefly our recent history, it is simply because it seems right to me to underline the worth and continuity of the role played by industry and the constructive thoughts which derived from it for the development of society in the changeable and varied needs it has since expressed.

When the productive and industrial structures had to be completely rebuilt starting from nothing, they were weak and uncertain; European businessmen, with a good deal of courage and foresight, understood that the problems of reconstruction and development could be solved only in the framework of a policy of real international economic collaboration.

This then was the attitude of European industry; it helped and favoured a policy of gradual freeing of the exchange of goods, services and currencies, adhering faithfully to the establishment of the OEEC and the European Union of Payments. This policy represented a fundamental economic choice and a confirmation of faith in the ideals of political liberty; it gave industry the task of setting in motion a process of expansion, supported by quantitative and qualitative mobilisation of its own resources. It was necessary, moreover, to produce in greater quantities at ever lower costs, to make available materially

(*) Translated from the Italian

and spiritually that which was needed by the collectivity, to inculcate once again in everyone a confidence in his own creative ability and his own future. This is what society was seeking at the end of the forties and throughout the fifties; industry met these needs whilst safeguarding at least one of the four fundamental freedoms: freedom from want.
In the same way as it received favourably the freeing of exchanges, European industry became also the real stimulant in creating the European Community, which developed into a reality during the sixties. We felt then that the vast process of harmonization and coordination which would follow would benefit not only industry itself but, above all, the social and civil progress of all the participating countries. We realised then that the creation of a single large market would give positive results measurable not only in economic terms but also in political ones for the drive it would give for attaining an integration at all levels between the Community countries.

Looking back to the distant and recent past, we notice that this act of faith has found a clear expression in the facts; today, the Community is capable of reducing sharply internal economic and social instabilities whilst externally it is preparing itself to meet the increasing demands for cooperation and integration encouraged by the evolution in political, social and economic relations which will characterize world cohabitation in the seventies.

I do not at all underestimate the difficulties which this system of open competition and necessary competitiveness has created for industry in free countries, whilst stimulating at the same time technological and productive development; the difficulties which have beset certain currencies, tensions in the capital markets, the increasing structural deficits in the balance of payments of certain countries, monetary restrictions, the recent protectionist manifestations and restrictions in international exchanges, all these constitute expressions of the continued wish for the removal of frontiers and has already been achieved in international economic cooperation.

However, it is not on these aspects that I propose t [illegible] bj
report is only that of underlining the urgent need f [illegible]
limit itself to the prot[illegible] of results already obta[illegible]
aims for itself.

Necessity of a "real C[illegible]

The agreements reach[illegible] adual
Monetary Union of [illegible] for th
Programme for Medi[illegible] cy
direction required an
practical application.

But what in my view is now urgent is for the Community to become as quickly as possible a "real Community", in which a policy worked out democratically and with the participation of all shall allow for a strategic action to be *mapped out for the confrontation of* common problems in the interest not only of a few but of everyone—in a new bond of world stability, the contribution of its own civilization and of its own experience. Only through a full awareness of this necessity can Community countries evaluate that which has already been achieved and, in the present state of the world situation, change into reality the plans which seem realisable whilst removing the serious danger which can already be foreseen. In other words, it is essential to face with a sense of urgency and with diligence the basic problem of a gradual and reasonable coordination between the economic and social policies of our countries, above and beyond purely commercial and monetary considerations.

The business world is directly and keenly interested in this irreversible evolution; I even think that it is the best qualified social element to help the political world to understand the necessity and to act energetically and promptly for the fulfilment of this "reform" which I do not hesitate to qualify as historical. This is the "reform" which will enlighten tomorrow's society in a contest which shows always more vividly how erroneous and dangerous the concept is of absolute political power, it would be wrong to draw up the numerous reforms which today's society needs within the narrow limits of national borders. For this to be possible, it requires, however that all social forces realise that only a "real Community" can solve the many problems wherever they may occur.

To this end, the Community will have to acquire its own distinctive personality to express a real political will. Much has certainly been done up to now but this is no longer enough.

The Community has prepared interesting and valid proposals on important subjects like the Economic and Monetary Union, the policy of relations with *Third Countries and policies on* agriculture, social matters and energy. More *often than not, their fulfilment has not been possible; when it has been, it has* given negative or only partial results. This failure is due to the fact that only a "real Community", capable of expressing democratically its own overall "policy" can enforce a strategic action in which the various political and sectoral elements find their settlements in terms of harmonization and compatibility.

Through want of such policy, industry has had to bear the main consequences, above all, during the Sixties. It will suffice to think of difficulties arising from the ever faster technological progress and sharper international competition; the necessity to adjust conditions of competitiveness to the new dimensions of markets, in the absence of an institutional framework which, whilst harmonizing instruments on norms, legislation and administration of a single country, helps enterprises to surmount the increasing problems of organizational, economical, financial, social and commercial aspects.

Even in the presence of such difficulties, European industry has shown an unequalled ability and quality for dynamism and for gradual adaptation to economic and social changes, these qualities can be seen through the considerable economic and social expansion of the Community where industry has been the dominant factor.
Today, industry finds itself faced with a new reality, new demands, with the contest of traditional systems and values. Latent and long-neglected needs are rediscovered and exposed, sometimes irrationally, in an impetuous search for higher levels of well-being and justice which humanity believes can be attained through a better propagation and use of knowledge, of techniques and available resources.

Imbalances to eliminate

These demands are due frequently to a deep rooted want of stability but today's incompatibility is fully aware of this in a background of general and wider progress. I refer, above all, to territorial imbalances which require decisive rebalancing so as to secure for the populations of large regional areas, particularly the Community's peripheric zones, a fairer penetration in the circuit of general economic development so that they too can attain the higher levels of material and spiritual well-being they yearn for.

The business world is ready to accept this new challenge; as in the past, it has taken upon itself economic and social reconstructions and it accepts also the wider and various responsibilities connected with the needs of today's industrial sector; it acknowledges that industry is an instrument at the service of the community and that the contribution made by enterprises to the productive and technological development is an indispensable element to reach the fundamental objectives which any industrialized society aims at.

At the same time, used as it is to operate in an international sphere in terms of competition, of realistic reconciliation of needs and conditions always diversified and frequently contrasting, spurred by a taste for risks which is its particular characteristic, the world of industry has already felt, perhaps more through intuition than design, the opportunities which would have been offered to its development, and, in general, to a greater extent to the economic development of European countries, by a radical modification in the traditional formulation of economic, social and cultural activities.

Our democratic society, however, is based on a pluralist system where the common process of development must be borne by numerous and coordinated decision-making centres; it is necessary therefore, to avoid any temptation at self-sufficiency but, on the contrary to solicit all the members of the society: political, syndical and intellectual, so that they may participate according to their own role and their own responsibility, to the solution of common problems.

In this formulation, certain sides contest and undervalue the need to produce wealth and whilst a different distribution of resources and a continuous improvement of social benefits and conditions of life are invoked by them, they forget that economic growth is a prejudicial condition in the civil progress of society and since industry is a prime mover of such growth, it is essential that it should have the possibility of carrying out efficiently its first function—that of leading.

Political powers are, above all, the ones which should be aware of this mutual relationship, assessing rightly the difficulties industry has to overcome in the everyday international contest; these powers must understand the urgent need for developing a common industrial policy which ensures that the conditions necessary to enterprises aiming to operate in a free and enlarged market, can put to maximum value the large opportunities offered whilst, at the same time, facing outside competition on the world market. Enterprises know that international competition does not allow for errors but they also know that the world market is their real frontier and are ready, therefore, to move in this sense.

Regarding the initiative of the European Commission for the completion of a common industrial policy, industry in the Community has given and will continue to give its support and its full collaboration

It is necessary today for Governments of Member Countries to conform to such initiatives. The freeing of exchange is not in itself sufficient; the many technical, administrative and fiscal obstacles must be removed as hitherto they make the free movement of goods difficult, they influence the income and the cost of industrial production It is necessary, therefore, that the States adopt a policy of effective integration and freedom through the harmonization of the respective regulations and norms.

But an industrial policy which proposes to encourage a still stronger productive development implies also the possibility for industry to enlarge its presence, not occasionally but under stable conditions, in the international markets; that is to say that a strategy of penetration based not only on increased exports but also on the international movement of capital in firms of international character is required. Such policy must allow industry to enlarge its productive limits also qualitatively by aligning itself to the dynamism of processes achieved in advanced countries, by a speedier structural flexibility, by a better sectoral selection and by acquiring more rapidly results of technical-scientific research and improvements.

This is a *matter of European* industry being able to respond in an opportune way to foreign conditioning. This stipulation is deduced in the first place from the strength and size of the productive structures in the industrially and technologically more advanced zones outside the Community.

To this effect, the Community must be [illegible] may occur and which must be [illegible] pate through insufficient skill and [illegible] stability; the other, of provoking [illegible] in confrontations, through the [illegible] legitimate interests of others.

Both dangers are [illegible]

The increasing participation of developing countries [illegible] economic affairs, imposes in its turn [illegible] Community.

This policy must not have merely a commercial [illegible] to evaluate the complementary [illegible] and these countries in relations which take [illegible] moreover, the overall and [illegible] there is a need of new [illegible] [illegible] demo with [illegible] particularly [illegible] There is a need therefore [illegible] [illegible] related to the development [illegible]

[illegible]

national policies only but require a common and coordinated effort, an effort which aims at the completion of institutional conditions, the infra-structural, economic, social and financial ones necessary so that capital is induced to flow towards work and not the other way round, so that industry may responsibly exercise its function of leading, so that social tensions are lessened and cut down disparity, even cultural, incompatible with human and political purposes inherent with the concept of the Community itself.

The improvement in the standard of living as I have already said, is the second main objective to draw the attention and pledge of industry in the ambit of general problems linked to civil and social developments of the Community; this attention and this pledge, the industrial classes propose to express through the contribution of their experience and of their ability to adopt new ways.

With regard to this objective, we know which argument of particular stress and increasing importance connects productive development and technological advances on the one hand, degeneration and pollution of natural surroundings on the other. It has caused some certainly interesting appraisals and accusations and mistaken interpretations of past and present phenomena which I think it is opportune to put right and I will set out the real terms of the problem.

I have already mentioned that during the fifties and the early part of the sixties, industrial development reasoning and, therefore, that of scientific research and technology was inspired mainly by the need to produce always better and in larger quantities at lower costs, through the better use of resources.

If this has largely contributed to satisfying the primary need of a quantitative order, it has forcibly left in the shade certain qualitative aspects of economic progress. There followed amongst others, serious problems of ecological surrounding which led to an increasing awareness of the worth of irreplaceable advantages which are essential to humanity, also a clear intention to direct the imposing capacity of progress at our disposal towards a qualitative improvement of human living conditions, taken individually or in groups.

Problems to be solved

I think I can state that industry is fully conscious of the necessity of rethinking and of setting its own objectives accordingly. However, for such a process to be effective in the countries of the Community, we must realise that single or incoherent actions are no longer sufficient.

In other words, such problems as, for instance, the protection of surroundings from pollution can find their solution only through the coordination and increased efficiency of all sectors and not only of industry.

On the contrary, legislation by individual countries in this connection is in-

sufficient; it does not answer any of the common charges, it is even frequent contradictory. The general tendency is for industry to be made to bear all tl responsibility whilst, in fact, it represents but a small element in the process pollution.

The relative toleration margins are evaluated differently from one country another, from one sector to another. A well thought out and progressive limit tion of those margins involves costs which increase proportionally. Differe policies in this matter could have very serious repercussions on the mo economical use of resources and at international competition level. If, as seems reasonable to suppose, the major responsibility for a broad and decisi policy of remedy should fall on the shoulders of national communities, on th budgets of the various States and in the end, on consumers, the foreseeab entity of the onus would seriously affect the socio-economic policies of th single nations.

This is a particularly important example of the present situation. Multination cooperation in major programmes of scientific and technological research just another valid example; these programmes will have to take increasingl into account qualitative considerations apart from quantitative ones, evaluat and encourage the direct use industry is prepared and able to give for thei better fulfilment.

Closely linked to technological development are also the problems of larg industrial installations for basic products; in my opinion, these problems de serve being referred to again since they are also apt to condition the futur economic good order of a "real Community". The fact in itself that in thes sectors the optimal dimension is constantly increasing together with eve heavier charges for research and technological modernisation make it possible tc foresee the practical danger arising or already present in certain sectors, of an important surplus production which will jeopardise the economic stability of the enterprises involved, its prospects of economical use and fair profits from the investments concerned. We need only quote the now famous case of ethylene, where national projects from the USSR, Austria and Italy foresee surplus availabilities for which one cannot think of adequate outlets. It is clear, therefore, that also in this field, efficient cooperation will be necessary at Community level to avoid that the dangers referred to should become reality and perturb the economic development of the Community.

I would like to reserve a last fleeting allusion to social problems which hitherto have been considered the preserve of individual States but which cannot now fail to interest a Community sincerely wishing to be such and which affect directly its industrial component. I refer to problems of internal emigration, of housing, transport, health services and education at all levels; these have many-sided aspects but they amalgamate coherently at the demand—today it is general and urgent—for a substantial improvement in community living and for the satisfaction of the more elementary needs.

Conclusion

In order to solve these problems, it is necessary in my opinion that all of us should be aware of a new reality. It can be summarised in the "overall character" of the problems which have received our attention and which preoccupy us. This overall aspect necessitates overcoming the present social-economic instability and the coordinated evaluation of the contribution that each social element can and must express for the fulfilment of a better community way of living.
that each social element can and must express for the fulfilment of a better community way of living.

I am quite convinced that to this end the contribution of the business entity cannot be substituted and is vital. In speaking of industrial society, a critical if not outright contemptuous shade of meaning frequently and easily appears yet I believe very few today would be prepared to do away, even if only in part, with what industrial civilisation has made possible in terms of progress and well-being. The important thing is that this industrial civilisation should know how to live up to the new needs and apply itself and succeed in making itself kindly-considered, if not "loved".

Maybe important changes will be required, not excluding the search for new patterns but, up to now, no clear picture has emerged nor any attractive results.

The European Economic Community with its impressive economic strength, its splendid tradition of civilisation and culture, its unsurpassed creative abilities, can prove to be the real medium for the fulfilment of such new patterns of life in a community.

To achieve such an attractive aim, the pledge of everyone is required, from businessmen to workers, from politicians to administrators and legislators.

I firmly believe the social communities of each of our countries have everything to gain from this mutual relation of interests and from a coordinated decision on specific problems.

The time available for the realisation of this "true Community" is unfortunately short; at world level, big moves are being made which will decide the fate of free countries. The important thing is for the European Economic Community to participate in it with "cards in order" and above all, with the weight and prestige which belong to it. But for this to be realised, a unity of interests and objectives is necessary, this alone can give to its presence the determinant efficacy to vie with it.

It can be said equally clearly that industrialization is a means in the service of objectives.

Among these objectives we may quote: the creation of jobs, which is an overriding necessity because of the exodus from the land, collective redundancies following structural reforms of all kinds in all sectors of activity, young people in search of their first jobs, etc. . . .

It should be noted that productive investment does not always correspond to the creation of jobs once it is applied to structural reforms, which, in their initial stage at least, lead to manpower being made redundant.

It is sufficient to note that productivity, which is not a bad thing in itself, often exists side by side with an aggravation of unemployment, at least in an intial period.

Industrial development is necessary for harmonized regional development. The latter has no chance of succeeding, except in periods when business is booming, unless the Community is capable by acts of will of spreading the expansion over the whole of its territory.

Unfortunately, we have not got to this stage, and it would really seem that regional concerns appear only in declarations of intent, but not in the Community policies.

The acquisition of new advantages for workers through the intermediary of laws and collective bargaining agreements obviously depends on a high state of economic development, and this more particularly in the industrial sector.

Attention should also be drawn to the fact that excessive disparities in industrial development between Community countries, create difficult problems at the frontiers, which are a source of specially worrying imbalances.

All industrial development must further be based on a satisfactory balance with collective and social facilities. Unfortunately this is not always the case. However, social equilibrium and regional development in particular depend on this balance.

It also happens too often that the States, in the framework of their national plan, their programme or their forecasts, put in hand research on the overall rate of expansion to be achieved and the general means of attaining it, particularly in the medium-term, whereas at the very same time this rate itself is at the mercy of increasingly numerous external hazards. At the same time, if there are figures, we note the absence, not of an industrial policy, but of industrial policies.

Why should industrial policies be defined? It is obvious that occupational

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...ing of the burden, of how fair it is and of its results.

...leration of reconversion operations, changes and mutations

...resent, reconversion operations are of different dimensions than formally.

...so long ago they generally affected one more or less important enterprise. ...y whole branches are threatened: coal, textiles, mineral ores, etc. Further... these branches exist side by side in the same region, which means that ...nversions have come to be occupational, inter-occupational and regional.

...ere any need to add that the frontier regions of the Community are ...erned?

...extension of these operations also poses political problems as soon as, in ...nd the same country, regions of old industrialization, which are therefore ...ning, are juxtaposed with others which, being of more recent development, ... the best adapted, most progressive and most highly qualified industries.

...alanced evolution as between regions

...e is no blinking at the fact that the European Community has not at...d enough importance to regional development. The EEC Treaty, although ...rfect, has made it possible—by extensive interpretation—to apply policies ...econversion, regional investments and subsidized housing, among others. ...ever, the Treaty of Paris is limited to two branches albeit important ones.

...btless, the Community has worked on analyzing regional problems by ...s of the opinions and reports of the European Economic and Social ...mittee. Guidelines have been laid down and very partial measures are ...aged, but all this cannot be enough. What is lacking, here again, is will ...esources.

...y case the Community cannot allow the illusion to grow up that industrial ...ntralization will be the effect of a natural evolution. On the contrary, ...al development is in the other direction. The aggravated disparities ob...d at present more than prove this. Here again, it will be one of the es...l tests of the Community will that it assigns social and human ends to ...opment.

Rapidity of the evolution of science and technology

This evolution is both an element of regression and advance on the social scale.

There is regression as soon as it leads to maladjustment, either because the persons concerned do not possess any basic training, or because the break between the old and new manufacturing processes leads to chronic maladjustment, so that these persons are left by the wayside as society progresses.

Advancement will not be a gift. It will not be possible in all cases, but the great point at stake is how to profit fully from changes and mutations in such a way as to improve the lot of human beings. This will presuppose a complete process—to which we will return—of general training, technical training, occupational training and further training.

But qualitative and quantitative increase and improvement of training, by giving equality of opportunities to everyone, will still allow a hiatus to exist between qualifications acquired and jobs held.

Concentrated powers and diluted powers

Concentration is a general phenomenon which is internal to each of the Community countries, within the Community itself and willed by it, particularly in the form of the creation of European limited companies or of groupings of firms with a view to cooperation. The multinational companies make their presence felt on a vaster geographical scale.

Although concentration as a technical means of attaining certain deliberate objectives cannot be called into question—it develops moreover under all regimes—the question may be asked whether the State and the Community itself have the powers to offset the strategy of these firms. This is why, moreover, the quarrel for or against supranationality today appears very much overtaken by events. There already exists, and there will exist even more in the coming years, a supranationality of business. What will be the offsetting powers?

What will be the degree of responsibility of the directors of establishments? Will it really be possible to begin a dialogue to harmonize and develop collective bargaining agreements and to ensure social protection and guarantee security of employment?

What will be the behaviour of the parent enterprise which is in a position, as regards the siting of firms, to play as on a chessboard?

These facts, these fears, or these questions show quite clearly that the watered-

down powers of the States do not correspond to the factual situation of concentrated powers. This is another way of saying how necessary it is to create a Community endowed with political powers of its own.

Imbalances which reappear incessantly

It has to be recognized that all growth, particularly industrial growth, is the source of imbalances which are incessantly renewed and are due to the speedier pace of change. Adaptation in the wide sense of the term becomes a permanent phenomenon.

But what is unfortunately, and too often, perceived inadequately is that imbalances from outside add their effect to internal imbalances.

The monetary crisis of 15 August 1971, the opening of frontiers between Common Market currencies—which presupposes reciprocal adjustments—the tariff negotiations between the Common Market and the non-member countries, the privileged relations with the developing countries, which will have to be expressed in forms going beyond traditional trade—solidarity and associations—are so many elements whose influence we undergo, which we accept or desire and which are sources of imbalances.

The de facto international division of labour

Industrialization involves the risk of finally creating geographical divisions, even within the Community, between labour-intensive industries and those which make use of much capital and a wealth of techniques. This situation continues and even becomes aggravated when it is a matter of the developing countries.

In this way a *de facto* division of labour grows up between regions or between countries, which must be corrected as quickly as possible.

The maintenance, to say nothing of the perpetuation, of such a situation would engender injustice and revolt.

Position of the worker in this setting

There can be no doubt that national legislation and collective bargaining agreements are far from perfect, but the trade union organizations, which are the natural mandatories of the workers, possess at national level possibilities of direct action which they do not always have at Community level.

As regards enterprises, their dimensions (volume and geography) make collective concertations and conventions more difficult.

The centres of decision recede from the human being, dehumanize relations even more and give rise to doubt as to the possibility and efficacity of any dialogue.

The rights exercised by the workers appear to be more limited.

In this way, in European limited companies, uncertainty reigns as to the representation of the workers and the real rights which will be exercised.

Thus, the new dimension of the problems is not accompanied by a new dimension as regards the rights exercised by the workers and their organizations, either in the Community, or in the new enterprises created or in the course of creation.

Social policy in all its aspects has no Community rules and too often remains at the stage of coordination of national policies.

II—WHERE DOES THE COMMUNITY STAND TODAY?

The European Community, which is in the process of enlargement, has not yet become sufficiently strong. The common policies laid down are not implemented, with the exception of agricultural policy, which is in danger of being called into question in the tariff negotiations with the non-member countries.

This situation poses special problems at the time when four new members are adhering.

Does this mean that the Community has done nothing of value? The establishment of a common market, the opening of the frontiers have triggered off an overall increase in prosperity, and the development of investment has obliged enterprises to adapt themselves to the general movement of economic expansion. But this development has been accompanied by imbalances of which it may be said that they boil down in essence to the following:

(a) Imbalances in incomes;
(b) Regional imbalances;
(c) Imbalances in employment;
(d) Monetary imbalances;
(e) Imbalances in economic and social policies which make it difficult to follow the path towards economic and monetary union;
(f) Imbalances provoked by structural changes, in particular reconversion and concentrations;
(g) Imbalances between the vaunted intention of preserving competition and the actual situation which, through understandings and dominant positions, is leading to enterprises or professions being in a position to proclaim their own rules,

(h) Imbalances due to the difficulty of ensuring fair distribution between productive investment, collective facilities and consumption;

(i) Imbalances due to the fact that the rules of competition are increasingly having the effects of slowing down in each of the countries the evolution of social progress, whereas no attempt is made to research non-wage production costs which it is in the joint interest to reduce in order to facilitate the growth of productivity;

(j) Imbalances brought about by the inability of the authorities to throttle down inflation, otherwise than by proposing classical methods which are today recognized as harmful: putting the brake on wages, leading to unemployed production capacity, accompanied by overgeneral credit restrictions, this whole process leading to regression and recession, whose duration it is always impossible to foresee;

(k) Imbalances in European programming, which is confined to recommendations or even to proposals in which the concern for balanced expansion seems to cover up trends leading to the acceptance of a certain amount of underemployment. The economy of each of the countries is juxtaposed with those of the others, without any clear expression of the absolute need for interaction in law and in fact. In many cases, Community policies, although they are the subject of definitions, guidelines and declarations of intent, are not endowed with the resources necessary to implement them and the institutions capable of applying them in the Community interest.

It is true that disequilibria are the common lot of any society which is on the road towards expansion or confronted by external forces, but in its present state the Community has no policy of reaction to events, nor any will to intervene in a permanent struggle against ever-emerging disequilibria and the injustices which they involve.

This is the important fact. The practice of laisser-faire, of letting things go their own way appears to dominate even if it is true that praiseworthy declarations of intent accord a certain importance to these problems.

Does this mean that the militant trade unionist, who has believed in Europe from the outset, that is to say, long before it took concrete shape in the Treaties, is overcome by discouragement, or even by renunciation?

No! For the essence of the European edifice resides in its basic capacity, which derives from its very existence, to preserve freedom and ensure peace.

The arrival of four countries with tried and tested democratic institutions lends strength to the six others where liberty is concerned. In a tortured world in which conflicts are numerous and in which here and there bellicose nationalism is again raising its head, it is decisive that ten countries should constitute a large-scale whole, capable, if it is endowed with political will, of being an essential factor in the defence of human freedoms.

There can be no doubt that peace will result from the cooperation and then the integration of countries which a short while ago were belligerents and of which several have met on the field of battle three times in a century.

This means that we must not condemn the present trend, but that it is indispensable to remodel resolutely and even to transform and design what a more human, more just and more fraternal society should be.

All this so that the peoples of the Community may live more happily, but also because, if they stand together, they can show that their novel edifice may serve as an example for the rest of the world.

And this example will be reflected more particularly in the relations with the developing countries, and in the will to struggle together against all disparities and all injustice, in such a way that the young people of the industrialized countries may not live in comfort, boredom and confusion, whereas their opposite numbers in the developing countries suffer the pangs of hunger, the curse of illiteracy and the refusal of human dignity. There is room here to recreate an ideal of cooperation and solidarity in which the fresh forces of youth would have plenty of occasion to deploy themselves.

At this point, it may be thought that these considerations are wandering from the subject. We think that this is not the case at all. The title is also "Society". Moreover it would not be conceivable that, in connection with the industrialization of the Community, that is to say its expansion and growth, we would not question ourselves as regards the aims of such expansion and growth. For industrialization is not an end in itself. It can be a means in the service of great objectives, but we have to grasp the fact that things will not happen of their own volition.

Natural evolution, laisser faire, let things slide, and growth for egotistical reasons are so many obstacles which must be overcome if Man is to be protected, promoted, his liberties and dignity preserved, with the assurance that his efforts, added to those of others, will create solidarity and cooperation—in one word, will establish peace.

Rather than defining a society in constant evolution, always needing reform and always secreting inequalities, injustices, infringements of freedom and dignity, it would be better to see how this European society, which we know, may transform itself by profiting to the maximum from the means which it derives from the expansion and progress of science and techniques, on condition that the will exists to do this.

All these points will be the subject of the second part.

Industrial policy

We have seen that industrial policy can accentuate imbalances. This is why, although its necessity cannot be called into question as regards the increase in incomes, employment and re-employment of workers, it is indispensible that the European Economic Community should assign to this policy the role of an instrument in the service of social and human objectives.

These objectives will not be achieved by the natural evolution of things. It is even possible to move away from them in the absence of a definition of Community orientations and resources fitting into a body of policies which themselves are fully Community.

It is these policies which we are going to endeavour to describe, it being understood that, on the basis of the ideas put forth, later studies will make it possible to pinpoint the concrete measures which will have to be taken.

The final objectives of industrial development

In a Community enlarged to ten countries, the first concern must be to apply a regional policy, often defined in the Community institutions but in the majority of cases lacking means for its implementation.

Regional development is conditioned not only by industrial development, but by the provision of collective and social equipment in the widest sense of the term, that is to say not only what directly interests the industrialists, but also those facilities which condition the type and setting of life.

The financial requirements will be considerable, but it will also be necessary to be in a position to dispose of real estate, which today is the subject of inadmissable speculation. It would be vain to endeavour to plan the use of the available territory if private interests were to oppose the ownership of land by the collectivity.

Town and country planning, more particularly as regards transport, which provides the means of irrigating the Community's territory, must be actively pursued, unless the decline of the peripheral regions is to become worse.

Moreover, regional imbalances would make the achievement of economic and monetary union extremely difficult.

Transport is also extremely important inside the towns, when we observe that the urbanization process often leads to the congestion of certain built-up areas.

Regional policy must result in diversification and spread of economic develop-

ment. In the present state of affairs, where will is lacking, where the proposed approaches are insufficient and where the measures envisaged and not yet applied are still too much on a partial scale, the Community runs the risk of promising industrial decentralization, whereas, in fact, economic development is increasingly going on through concentration.

An active employment policy

The Standing Committee on Employment should be a good instrument through which it will be possible to propose solutions to quantitative and qualitative employment problems.

Faced with the great movement of change and mutation—reconversion, concentration, structural reforms, headlong progress of science and technology, accentuated impact of external events, evolution of occupational sectors, often growing inadaptation of those looking for work to the jobs being offered—any policy must be based on forecasts and updated to meet quantitative and qualitative changes. Such a policy must have available instruments of adaptation and of general advancement, both technological and occupational.

It must be based on objective information concerning the trend of education and professions.

Furthermore, we have seen that any development policy accentuates the disequilibria between industrial sectors. This is why an industrial policy cannot throw its net too wide. It is advisable to make more detailed analysis within occupational branches, in many cases, in view of the change in pace, industry will be declining and it will be advisable, therefore, to define, in particular by agreements, the fate of those who in any case will remain in these declining branches and of those who will be led to leave in search of other activities. This poses, *inter alia*, the following problems: remuneration, readaptation, working conditions, regional investments, subsidized housing, adaptation to a new setting of life, etc....

To all this should be added that an active employment policy will have to help those which economic development throws on the scrap heap, that is to say, eldery persons and persons ill adapted or unadaptable to new forms of production and for whom social measures will have to be envisaged, in particular retirement before normal age.

An overall balance sheet of what the Community has done in the matter of employment will need to be drawn up in such a way that the deficiencies in this policy having been brought to light, it will be possible to remedy them.

In any case, the principle must be laid down that it would not be admissible

that the general prosperity of the Community should be acquired at the price of imbalances in employment and even of unemployment and downgrading of individuals at the very time when qualifications are progressing.

In brief, the social cost of reconversion must be borne by the Community.

A training policy

This is doubtless inseparable from employment policies, but must go beyond it once the objective aimed at is the transformation of Society.

The Community collectivity must attach primordial importance to this problem if it is desired to ensure equality of opportunity in practice.

The child does not always receive at school specific training without which he will become increasingly incapable of ensuring participation and action within the collectivity.

In accordance with his social milieu, a child cannot accede to higher education for lack of resources, a lack which moreover is not offset by the mediocre *scholarships awarded.*

Education and training must become permanent, both for those who, because of their parents lack of financial resources were obliged to abandon their studies and for those who, for physiological and character reasons, were not apt for study at a decisive moment in their scholastic training.

It is evident that the school and post-school periods must become increasingly complementary and make it possible in the aggregate to ensure the continuity of a solid, general and occupational training which are conditions for full development of Man and multiskill occupational training, which are major problems in face of the mutations and changes going on.

Finally, the Community, like each of its component countries, will have to ponder the fact that it is impossible for everyone to occupy in a society, of whatever form it be, jobs which always and necessarily correspond to their knowledge. And yet, Man must be lifted above himself, in particular to strengthen democracy.

This brings up the problem of the full development of Man in his work, but also outside his work, in his family, in collective life in the city, etc....

Social policy

The overall prosperity which we have emphasized many times goes hand in hand with intolerable disparities which must disappear.

The accentuation of social progress comes up against two situations on which the European Economic Community has not sufficiently expressed itself. These are:

(a) *Competitiveness.* This has become the key word. May it not be feared that this will lead the States to apply policies slowing down social advantages on the pretext of competition, a situation which is unacceptable from the social, but also from the economic point of view, because the driving force behind expansion is a balance between the growth of consumption and investment.

  This leads us to request that the Community should define its policy and state clearly that economic and social progress demands a progression of wages and social advantages and a reduction of the nonwage costs due to inadequate productivity, speculation, situation incomes, etc....

(b) *Inflation.* It is true that this is spreading throughout the whole world, but the battle which must be waged against it cannot be satisfied with over-simple and dangerous remedies, such as a slow-down in remunerations, non-utilization of production capacity, or scarce development credits. Fortunately, these approaches are losing ground. People are aware today that the causes of inflation are multiple and varied: the market, lack of job qualification, speculation, situation incomes, protected sectors, deliberate price policies in public services, agriculture, etc....

Evolution of collective bargaining

It is quite evident that social policy is harmonization in an upwards direction of social legislation. It is also the possibility for trade union organizations to negotiate collective bargaining agreements: (remunerations, working conditions) and to extend the field of matters dealt with and the geographical area.

The role of the Community is to facilitate the development of this policy and chiefly to supply information and statistics, and this at a sufficiently decentralized level in each branch for them to be significant.

Although it is true that the policy of industrialization requires valorization of industrial work, both material and moral, we are obliged to recognize that at the present time this is only a pious wish. This valorization can only come through improvement in working conditions, social advantages, the length of the working week and remunerations.

Incomes policy

Incomes policy, which has been a failure in several countries, has, on certain occasions, been proposed at Community level. The idea behind this policy is a balance between the provision of collective and social facilities, productive

investments and consumption. It should be noted that it often appears residual as far as the last-mentioned item is concerned.

In reality, the obstacles to an incomes policy are many:

it reduces consumption. Experience proves that this is both a social injus and a handicap to expansion. It is not in a climate of relative austerity that action of investing is accomplished, if the internal market is uncertain and external market precarious.

Therefore, a brake on consumption and on investment is accumulated, of with long-term effects. Need one observe that a brake on expansion also le to a lack in collective and social equipment.

Consumption covers a disparity of incomes, some of which are checked a declared by third parties similarly limited and affected by taxation. The init effect of an incomes policy is, therefore, to strike incomes on a priority ba and to increase social injustice.

Both those for and against an incomes policy must agree that it is fi necessary to know the incomes. Quite a lot must be done in this respect order to exceed the aggregate level, which, in any case, is often witho practical significance.

Much more thorough knowledge would help in collective negotiations, whic still remain a decisive instrument of social progress and which make it possibl to safeguard the freedom of the contracting parties.

From the point of view of a better division of incomes, need one add that an action against disparities does not belong to an incomes policy but to a re distribution policy, to a fiscal reform policy, to a policy of structural reform to a regional development policy, etc. . . .

This also applies to direct and indirect taxation.

The growing needs of the Community with regard to equipment, infrastructure and development of the territory, as well as the need to socialize achievements require that the increasing tax levies' aggregate should be fairly distributed.

It should also be noted, as regards the financing of industrial developmen from taxation, that it would be very interesting to know what is its utilization and the results achieved.

The dimensions of industrial society

Within the Community understandings and concentrations responding to ver divergent motives are developing. Moreover, the Community, for reasons o

greater economic efficacity, is pursuing activities for the creation of limited companies, or groupings of firms, some with a view to mergers and others with a view to cooperation for certain important but limited aims. At the same time, multinational companies are developing. This new dimension, which cannot but become stronger in the years ahead, calls for the following remarks:

(a) will not the strategy of the large-scale enterprises be more and more independent of the orientation which the Community considers desirable?
(b) The strategy of the large-scale enterprises vis-à-vis their establishments, for which it may be feared that decentralization will be confined to management in the narrow framework of imperative directives.
(c) The strategy of large-scale enterprises can lead to the shifting of establishments for exclusively financial and economic reasons and to the detriment of social considerations.
(d) Will the strategy of the large-scale enterprises allow of any effective trade union action if, at the national level, the interlocutor representing these enterprises has no mandate to negotiate and undertake commitments?
(e) Will trade union representation in these new forms of enterprises be effective, and will its rights be recognized and respected?

The above shows all the importance which must be attached to supervision of understandings and concentrations for which European laws are very inadequate and international legislation non-existant.

Social strains

Apart from the external imbalances already mentioned, many questions arise at enterprise level:

The growing specialization of work, the monotony it engenders, the splitting-up of tasks which leads to repetitive and non-creative actions, the rhythm of intensity and continuity of work appear as particularly distressing phenomena.

Work on the assembly line is today called into question.

The fact that workers are not called upon to know and participate in the life of the enterprise creates increased strains. Moreover, the essential decisions are often taken upstream from the enterprise, without any internal participation, even on a consultative level.

These questions must be dealt with by the European Economic Community. France has just published an initial report which represents an approach to these problems: 'vers une organisation plus humaine du travail industriel" (Towards a more human organization of industrial work). For the present, this is only an outline which will have to be completed by other studies.

Having said this, Man can doubtless achieve fulfilment in his work, but even more outside it.

The human being, tired out by nervous strains, often over-crowded transport services, must be in a position to rest thanks to a progressive and effective reduction in the working week. This priority for the reduction of the working week, over and above periods of rest, must procure for the workers the necessary free time for more and more further training, culture, family life, thinking and communal life.

The nuisances and pollutions of industrial society

The French Economic and Social Council and the European Economic Community are concerning themselves with problems of the environment.

Need we repeat that even though speedier industrialization can be a further cause of pollution and nuisances, it is not the only contributing factor to these. It should be noted in particular that the destruction of the countryside is often the result of real estate promotion appetites incited by extremely profitable speculations. This is the general problem which should be dealt with, in particular by an active town and country planning policy into which should be dovetailed the campaign against nuisances and pollutions and for the preservation of nature and countryside. But this policy will only be active of it is capable of mastering the private interests which stand in opposition to the common interest.

As regards industry, the stress must be laid on prevention.

If there are charges which weigh on production, there can be no question of putting them on the same footing, on the human plane, with the protection of health and, on the financial plane, with the infinitely greater cost of repairing damage once it has been done.

The Community must therefore carry on vigorous international action, perhaps through the intermediary of the United Nations, so that all countries adopt preventive measures.

The Community itself should give the example by adopting legislation to protect Man, Nature, resources and the countryside.

The countries making it up will have to pool their information, research and experience.
The most significant cases will need to be researched at the level of enterprises and industrial sectors.

Associating the developing countries

The developing countries are going through difficulties which arise:

(a) for some among them from rapid population growth;
(b) from the difficulty, even in a situation where the overall income is increasing, of increasing individual incomes;
(c) from the growing disparities in income, compared with the industrialized countries;
(d) from the fluctuations of raw material prices.

International and Community aid is therefore necessary in different forms. But it must be well realized that this aid, whose detailed procedures will need to be re-examined, facilitates the industrialization of these countries.

Unfortunately, this initial industrialization leads to a sort of international division of labour, whose effect is to establish segregation between the industrialized countries and the developing countries. In the case of the first it may be observed that, since capital is abundant, and technical training developed, they are able to build up growth industries requiring high qualifications. On the other hand, the developing countries are generally obliged to limit themselves to industrialization, employing a large percentage of manpower, raw materials, or the production of non-sophisticated goods.

This international division of labour cannot be satisfactory and this is why, although for the time-being it corresponds to a *de facto* situation, it cannot have a lasting character. Diversification must come. In the first place, an investment effort must be made by insisting that the private capital which is invested should not be only at short term with the aim of achieving often excessive profitability, squeezing the country and then repatriating the dividends.

This way of doing things constitutes an inadmissable exploitation of these countries.

But if we wish that diversification should be a success, the campaign against illiteracy must be extended and the general and professional training, without which industries employing qualified manpower will not set up in the developing countries, must be increased.

At a time when the international monetary systems have to be revised, it is indispensible that the Community should associate these countries in the search for solutions, for the problems of balance are vital for all these countries, which must in particular obtain the means of financing their development and no longer be subject to the fluctuations of raw materials prices.

The instruments of economic development

(a) *Public enterprises*

Europe finds itself in fact in a situation in which the private and collective economic sectors exist side by side, the latter including the public enterprises. We cannot admit that the role of these should be reduced.

Public enterprises have, in fact, made it possible to achieve results in fields which are not immediately profitable, to ensure public services and to boost development, particularly through basic research, to modify structures and to provide highly technological facilities.

Too often in national plans and European programming nothing is done to define a policy for this sector, despite the fact that it constitutes an irreplaceable instrument of action.

(b) *The intervention funds*

Europe has certain funds available: the European investment Bank, the new Social Fund, the European Agricultural Guidance and Guarantee Fund. But these are all inadequately endowed and in addition are not coordinated. Yet they should constitute invaluable elements of overall financial policy. This is not the case and this is the reason why, as was demanded in particular in a recent report on regional policy, these instruments, which are today dispersed, should be a financial tool at the disposal of the Community for the achievement of its policies.

(c) *Planning*

In an economy which will be increasingly open to the outside world, there should be research into the ambitions and limits of planning. Too often the word planning or programming covers very different realities according to the countries.

European planning or programming should aim at:

(a) ensuring that the economies of each Community country are complementary and no longer merely juxtaposed. This is the obvious precondition for the achievement of the economic and monetary union.
(b) Introducing a long-term forward planning on the development of the Community and endeavouring precisely to elaborate a model of civilization. This defined picture of the future seems to be quite indispensable to us if every citizen of the Community is to have a clear vision of the objectives being pursued.
(c) Framing medium-term (five year) plans which are closer to reality, while taking account nevertheless of the fact that, with the passing of the years, the medium-term objectives defined in a plan tend to become outdated, because of the accelerated evolution, either within or without the Community, more particularly as regards production and employment.

(d) Giving to the assessment of the short-term economic situation which, every six months, must pinpoint the real trends, the possibility of proposing revisions, reflecting the real situations as closely as possible.

Moreover, planning cannot be an empty envelope. It must include policies accompanied by the resources necessary to apply them. However, so far European programming consists at the most of recommendations, some of which being more concerned with balance than expansion, have appeared to be questionable.

Of course thought will rapidly have to be given to the question of whether Community planning, which will cover a whole body of policies, which are an expression of the general interest, will be the master of the field. Is it not possible to suppose that planning will be breached by the divergent internal and external policies of the Community, worked out and applied more specially by concentrations, particularly in the field of regional development.

Civilization and industrialization must be compatible

It is certain that the free market economy which creates riches—but not always—cannot cope with the qualitative needs of civilization, more particularly:

(i) the protection and advancement of human beings;
(ii) public service;
(iii) regional development and town and country planning;
(iv) the redistribution of incomes;
(v) the maintenance of balances which are continually called into question.

This is why a "liberal" economy can obviously not lead to the achievement of these objectives. The Community policies to be implemented will have to constitute means of action in the various fields where it is necessary, not only to boost quantitative development, but also to give it social and human objectives.

The Community's real powers

The dilution of powers which remain at national level leads to:

(a) a weakened Community;
(b) difficulty in going beyond the definition of Community policies which are judged desirable while, at the same time, concentrated *de facto* powers are building up.

Realization of these facts makes it imperative to have an economic, social and monetary union progressively endowed with the powers necessary to ensure its functioning and to arrive within the shortest possible time at political union.

Economic and social democracy

The political democracy which will have to be found at the level of the Community institutions—Parliament and government—will not be sufficient. It must be accompanied by economic and social democracy which will enable management and labour to pronounce on the main guidelines, the outlook for Community development and the model of civilization which will have to be created day after day.

Doubtless the Economic and Social Committee is a centre for concerted action, but it has become apparent that it needs to be reformed. This is the meaning of the current discussion on its procedures.

But even if it is reformed, this body will be insufficient in itself.

Consultation between the two sides of industry must be at more decentralized levels in order to facilitate, among other things, the evolution of collective bargaining agreements, whose field of action must increase continuously, both as regards the subjects dealt with and their geographical dimension.

The consultation, on whatever level it takes place, must be the subject of complete and digestible information, circulated in good time in synthetic form and continually updated in view of the fluid nature of economic and social facts.

Economic and social democracy cannot be satisfied with a vague concert at a general level, if the decisions taken at the level of industrial branches and enterprises are purely a matter of the employers' will without the trade unions ven being consulted.

f this situation were to be perpetuated, it would have serious consequences for te future of the Community. Because of the new dimension of enterprises, te centres of decision are increasingly far away from the worker, who often in only bring this influence to bear—very imperfectly moreover—on the tablishment in which he works through the intermediary of his trade union ganization. But this establishment itself is often conditioned by a multitional strategy. Will the worker then be in contact with an interlocutor ving real power to negotiate new collective bargaining contracts, or to interne in the management in one way or another?

is is why it would be inadmissable that these problems should not be dealt h by the Community.

e establishment of European limited companies and the creation of groupings enterprises must not be motivated only by concerns of competitiveness,

dynamism, competition and economic efficiency. It is the Community's duty to see to it that, among the qualitative objectives, trade union participation will not be sacrificed.

It would be giving a curious model of industrial civilization if the role of the trade union were to be reduced to that of the Red Cross of the Economy, dealing only with the consequences—often socially damaging for the workers— of economic actions which would remain the reserved province of the States and the employers.

This is one of the essential acts which the Community must accomplish if it wishes to prove that the civilization to be built up is not, for it, the mere quest for material achievements.

Conclusions

These will be brief.

The Community, in the condition of a market and a customs union, aims at increasing its overall material prosperity by greater industrial development.

But the pursuit of material objectives cannot be enough.

A civilization, built to last, cannot emerge spontaneously from the multiplication of goods and products.

The fact is that the overall wealth of the Community and the acceleration of its pace of development can accentuate imbalances and injustices.

A *laisser faire, laisser passer* attitude must be condemned.

The Community's duty is clear.

Intolerable disparities must be effectively combatted: those which exist between human beings as regards incomes; those which are worsening between regions; those which bring up the question of war or peace when, at the level of the planet, some people are increasingly rich whilst others become poorer and poorer.

The regression of human beings on the social scale could be the consequence of the speedier pace of structural reforms and reconversion operations, which makes it imperative for the Community, if it wishes to be more than a talking shop, to introduce equality of opportunity by creating the means for constant human advancement.

The setting of life, the type of life and working conditions are perturbed at all

levels by pollutions, nuisances, nervous strains, the transformation of labour, congested transport facilities. Town and country planning must be one of the primordial tests of the Community will to make the general interest prevail and to assign social and human ends to development.

Political, economic and social democracy remains to be established. People's civic sense could be gravely impaired if everyone had the feeling that he was a passive instrument in often anonymous hands.

By its very existence, the enlarged Community constitutes a decisive factor for freedom and peace, but it owes it to itself to become, through its actions, an example for those making it up and for the rest of the world.

The model of civilization is conditioned by the will of the peoples and the accomplishment, day after day, of tasks carried out with stubborness and resolution in the framework of action aimed at placing the Economy in the service of Man.

THE SOCIAL AND POLITICAL IMPLICATIONS OF GROWTH (*)

Jean BOISSONNAT

No revolution in the course of history has so completely transformed the lives of so many men, or for so many years, as the Industrial Revolution. Unlike political revolutions, which are short, violent spasms in the life of nations, the Industrial Revolution is a continuing process that involves the destruction of social, mental and institutional equilibriums and the construction of others, as delicately balanced as those that went before. Together with material weatlh, industrialisation has brought insecurity to the heart of human societies, by making the future appear as no longer a repetition of the past, and frustration, by creating needs at a far higher rate than it could satisfy them.

Growth is thus only at first sight an economic process. It is measured and expressed in economic terms, that is in terms of production, consumption and trade. But it is an optical illusion to believe that politics are giving way to economics, merely because governments now spend most of their time deciding about interest rates, price controls and the incidence of taxation, settling labour disputes or encouraging industrial concentrations. In fact, by doing all this, they are influencing the objectives of society and the relationship between social forces. In other words, they are taking political action. Relationships between economics and politics, between material infrastructure and ideology, are ideological relationships whose direction may alter. The will to power, aggressiveness, the embodiment of ideologies once expressing themselves in wars or revolutions (and still, to some extent, doing so today) have found a new home in economic debate. In our day, Spartacus would be a trade union leader, Wellington would be President of Shell, Bonaparte would be Commissioner-General for Planning and Charlemagne would preside over the European Commission.

Current debates on the real nature and the prospects of economic growth are essentially political. Jan Tinbergen holds the Nobel Price for Economics, but he is taking political action when he proposes to replace the concept of "Gross National Product" by that of "Gross National Happiness". Sicco Mansholt is President of the Commission of the European Communities, but he is acting politically (and incidentally he makes no bones about it) when he puts forward, instead of the GNP, the concept of "gross national utility". The experts of the "Club of Rome" are taking political action, even if it is only by producing figures out of a computer as others might produce rabbits out of a hat, when they forecast that growth will come to an end in 2020. The great debates of our time are stated in economic terms, but their basic nature remains political:

(*) Translated from the French

(i) Is the organisational system best suited to produce and distribute wealth, of a capitalist or of a socialist type?
(ii) Is economic growth, as we understand it today, an advanced form of mass hysteria, leading the world to disaster?
(iii) In what ways can industrialised countries express the underlying interdependence of mankind as a whole, by contributing to the development of the Third World?
(iv) Why does Europe want to assume an economic individuality that will set her apart from the United States?

The object of this report is to bring out, starting from an economic analysis, the social and political nature of the phenomenon of growth as we experience it in the industrialised countries, and particularly in Europe. We shall consider in turn:

A. The origins of growth, bringing out the *non-quantitative factors* in the increase of production;

B. The consequences of growth which are not only the proliferation of available goods but also the proliferation of social stresses and conflicts; we shall consider the new forms of confrontation which have been emerging over the past few years;

C. Finally we shall ask questions, in the light of the foregoing analyses, about the future of growth and the role of social forces and political institutions, including the European institutions, in this future.

A—The origins of growth

From the end of the 19th Century to the 1929 crisis, annual growth rates for *per capita* output, in the main industrial nations, ranged from 0.5% (Britain) to 2.1% (United States), the rates in Continental European countries (France, Germany, Italy) being very close together at about 1.4%. If we skip over the economic crisis of the Thirties and the 1939-1945 war, we shall find a very rapid acceleration in the current period (1949-1963), since *per capita* output has grown, in these same countries, at rates going from 2.1% (Britain again) to 6.1% (Germany). All in all, the tempo of growth has more than doubled.

If we confine the scope of our investigation to the postwar period alone, growth has been spectacular in Europe, not only in its already industrialized western part (most of whose countries will come together in the new European Community of Ten), but also in its less-developed southern part (Spain, Greece, Portugal, Yugoslavia, Turkey) and in its eastern part, organised on the basis of socialist economies. In its 1972 Report the United Nations Economic Commission for Europe shows that Europe as a whole, which accounted in 1950 for 39% of the world's industrial output, as against 45% for the United States, was responsible in 1969 for 48%, as against 33% for the United States.
To analyse growth factors since the last war, we have two major studies: that

by Denison and Poullier for the main industrialized countries of the West,[1] and that by Malinvaud, Carré and Dubois for France.[2]

Both stress the importance of qualitative factors in economic development.

The study by Denison and Poullier covers the 1955-1962 period, with special attention to the United States, France, Germany, Italy and Britain. Its method consists in identifying the main factors of growth, in assessing the progress of each during the period under consideration and finally in weighting this progress in accordance with the proportion of the income of each factor to national income as a whole, so as to establish the contribution of each to national growth.

Now if we consider the great traditional factors of production, namely labour and capital, we shall see that they by no means account for the size of growth during this period. And this is true even if one brings in qualitative elements such as the higher qualifications of the work force. Here in fact is the share of these two factors in the growth of five countries from 1955 to 1962.

	U.S.A.	France	Germany	Italy	U.K.
Overall growth	+ 3 %	+ 4.82%	+ 5.39%	+ 5.78%	+ 2.56%
Share of labour	+ 1.22%	+ 1.35%	+ 1.60%	+ 2.12%	+ 0.44%
Share of capital	+ 0.73%	+ 0.84%	+ 1.57%	+ 0.80%	+ 0.80%
Remainder	+ 1.05%	+ 2.63%	+ 2.22%	+ 2.86%	+ 1.32%

Thus, neither the quantitative increase in labour and capital, nor the qualitative improvement of labour, fully account for productive growth in the industrialized countries. Far from it! In the United States, one-third of growth remains unaccounted for; in Europe, approximately half.

Taking their analysis further, Denison and Poullier bring in a third factor, that of "size": growth gives rise to economies of scale since, by enlarging markets, it makes it possible to produce more cheaply; moreover, the opening of the frontiers which has been typical of the European economies during this period also leads to larger markets, leading in turn to better returns. (Denison and Poullier, in their calculations, assess at one tenth of a growth point, for each year, the effect of opening the frontiers on the Common Market countries). Even so, there remains a share of growth which is not accounted for, and which is attributed to a so-called "residual" factor. This is still 0.76% in the

[1] Why Growth Rates Differ. The Brookings Institution
[2] La croissance française, published by Editions du Seuil

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The tentative list below makes no claim to be exhaustive. Nor does it allow us to evaluate the relative share of each of the elements that have been mentioned. But it is of very great importance for the assessment we shall have to make, in the third part of this survey, of the possibilities and conditions of continued growth in the years to come.

1—*The spread of education* has played a dominant part in every country. It has fitted an increasingly large number of workers for industry. Without it, the peasant would have found it harder to become a worker; the worker could not have hoped to see his children become white-collar employees, and they in turn would not have bred the managerial staff without whom our technological society would have been unable to flourish. To these effects of education on production, that is on supply, we must add its impact on consumption, that is on demand. The schools have not merely provided industrial society with the basic manpower which its factories and offices required, they have also sharpened the desires which it needed in order to find an outlet for its ever-growing output. Whatever misunderstandings or maladjustments may have troubled relations between the world of education and that of industry, the school has served the factory well, as it was asked to serve.

2—*The thirst for material well-being* may be regarded, to some extent, as a by-product of the educational system. It has grown to a size hitherto unknown, following on the Second World War, for the crisis of the Thirties and the War in the Forties had built up a tremendous backlog of unfulfilled needs. Certainly no more than five years sufficed, after the war, for a return to the level of production of the years preceding the conflict. But all of twenty years we required to mop up this demand, accumulating over the lean years and maintained by the sight of constantly repeated technical achievements.

3—*The precedence accorded to work over leisure* largely derives from this hunger for consumption. It shows itself, for instance, in high rates of gainful employment for women: in France, this rate, for women aged 25, increased from 47% in 1954 to 56% in 1968. A typical case is the young married woman who goes on working—or starts working, in order to equip her household faster. Gainful employment of women stands at a particularly high level in France (46% of women within the working age-range) and in Germany (40%), these being among the countries that have known the fastest growth: it does not exceed 30% in the other Common Market countries. Similarly, the decrease in working hours has been far slower than had been expected at the end of the war. From 1958 to 1970 there was no change in real working hours per week in France: the working week declined by an hour and a half only in Germany and two hours in Italy, but by three hours in Belgium and four hours in the Netherlands. It is true that annual holidays increased during this period. But if we consider that in France, during the first thirty years of this century, total working hours declined by 20%, one is still struck by the fact that,

20 years after the second world war, the French worked as long as after the first world war.

4—*The mobility of labour* has everywhere been an important growth factor. Refugees from East Germany were responsible for the "German miracle", just as the workers of the Mezzogiorno, going to seek employment in Northern Italy, were responsible for the "Italian miracle" and French peasants, leaving the land in droves, for the "French miracle". France, known for the low mobility of her labour, yet has, every year, 500 000 gainfully employed persons moving to another Département and over two million who work for a new employer.

5—*National ambition*, in many countries, has turned to economic growth. This has become the only goal which the State could set before the nation. This is particularly true of those countries which experienced defeat in the last war. It is probably no coincidence that the "champions of expansion" have been Japan, Germany, Italy and France, all of them countries with a glorious past, but which lost face during the war. They found in economic growth a kind of *compensation for the issue of battle—the only* compensation, incidentally, that the world's policemen—Russians and Americans—allowed them to have. It is no doubt also for this reason that France, Germany and Italy agreed more readily than Britain to set up an Economic Community.

6—*Competition between economic systems* has come to supplement, not to say replace competition in the traditional sense as an incentive to growth. Socialism has entered the lists as the official challenger of capitalism in the Growth Tournament. Today the Eastern countries can boast of impressive performance, even if these may be explained by the leeway to be made up and if the rise in the standard of living does not always keep pace with the increase in output. *Per capita* output over the last two decades has gone up by 5.6% per annum in Eastern Europe as against 3.8% per annum in Western Europe (statistics compiled by the United Nations Economic Commission for Europe). One may well argue this was not enough to make the Poles or the Czechs and Slovaks happy: we still have to take these figures into account.

7—*The increasing role of the State* in economic life therefore had political justifications. Economic policies have been refined in the light of pre-war mistakes, allowing a substantial improvement in methods of remedial action. Europe has thus achieved much faster growth than hitherto, without achieving higher rates, but simply by greater regularity. Cyclic fluctuations have not disappeared, but they have been far less pronounced than formerly. Over the past twenty years, virtually speaking, no country in the Community has experienced a decline in its production expressed as an annual average, except Germany on one occasion, and then only to a minor extent.

Moreover, States have acted on the structures of the economy, through nationalisation of important sectors (especially in France and in Britain), direct intervention of public bodies in production (Italy), substantial

budgetary contributions to investment finance, the establishment of social security systems, which have guaranteed a solvent minimum demand whatever the risks of life; creation of planning bodies for investments (especially in France) and for incomes (Netherlands) etc.

All things considered, the attitude of individual States has been far more dynamic than hitherto.

8—*The opening of frontiers* has been one of the main signs of this new outlook on the part of the authorities. As a result, countries with a protectionist tradition, such as France and Italy, now carry on *half* their trade with countries from which they no longer exact customs duties while, *vis-à-vis* third countries, they have the lowest protective barriers in the world, since the external tariff of the European Community is, on an average, no more than 6%, as against 7.1% in the United States, 7.6% in Britain and 9.7% in Japan.

Moreover the supremacy of the dollar, in spite of all its drawbacks, has guaranteed until these last few years a considerable measure of security to the international monetary system, after helping to finance, for reasons that were political far more than economic, the reconstruction of the Old Continent.

9—*Better management of firms* has gone hand in hand with better management of national economies by the Governments. In the sphere of management as in that of technology, Europe has had, over the United States, the advantage of drawing on two sources of improvement instead of one: innovation and imitation (or adaptation) of what had been done in America. Nor would this have been possible without a far-reaching change in outlook, not only on the part of managers, but also of workers.

10—*Inflation* itself seems to have encouraged growth. Provided it can be kept within certain limits it is indeed the least expensive method (certainly less so than unemployment, in any event), of restoring the balance of a decentralized management system in which there is no pre-established harmony between all the decisions of the agents of economic life. By helping debtors, inflation has made industrial risk more bearable. By handicapping creditors, it has to some extent redistributed capital, and creativity has gained thereby.

Following on this list, too long and yet incomplete, we can put forward a hypothesis as to the three non-quantifiable elements that have been the mainsprings of growth in Europe since the war; these are the delayed effect on the economy, after a lengthy period of frustration due to the crisis and then the war, of the mass education campaign undertaken at the end of the 19th Century; the mobilisation of collective energies for industrialisation, as the only collective goal available after the holocaust of the second world war, bearing in mind the fear that any new conflict might degenerate into a nuclear apocalypse, and the existence of a Communist challenge on the economic plane; finally the existence of a pattern for industrialisation, verbally disowned

but constantly followed in practice, the American pattern, a relative factor c security in what remained a venture into the unknown.

Education, defeat, the Communist challenge and the American precedent— strange mixture of ethical, social and political factors which explain wh Europe yielded herself up, for twenty years, to love of a growth rate. Britai was an exception, perhaps because her elixer lacked the bitter aroma of defeat perhaps also because, as the first nation to become industrialised, she was th first to experience the need to restrict growth in order to retain a certain styl of life. America, in her turn, is faltering, because there is no pathfinder to light her way.

B—The consequences of growth

We have just seen that growth has social and political origins; it also leads to social and political consequences. The accumulation of wealth, and changes in its distribution, alter social behaviour. As a result, far from appeasing conflicts, growth kindles them.

Economic development has everywhere brought about an appreciable increase in material well-being. The facts are known. All classes have gained, but not to the same extent. The costs and the benefits of growth are not evenly distributed.

In the first place, we must remember that all classes have not paid an equal price for growth. Among those who have borne the heaviest cost we must mention migrants of every kind, because the fact of leaving a firm, a region or a country for economic reasons involves deep social and emotional upheaval. Farmers and peasants have had more than their share of this: they were 24% of the Community's workers in 1955; they are now no more than 13% and this figure is expected to fall to 6% in 1980. From 1958 to 1970 those working in Community agriculture have declined by 6.5 million; a further loss of two million is almost certain between 1971 and 1975.

Some industries have experienced a contraction of manpower which is as considerable, though less well known: the labour force in the coal industry declined by 60% between 1958 and 1970 (625 000 people fewer), similarly in iron mines, where manpower has shrunk from 58 000 in 1958 to 18 400 in 1970. In textiles the work force is down by 25% (400 000) people) and in shipbuilding by 15% to 20% (50 000). Altogether it is thought that, in twelve years, two million jobs have been abolished in the Community's industries. Naturally, many others have been created over the same period, but these changes of occupation are not without their real human cost, even if they go hand in hand with a rise in the standard of living.

Migration between countries has grown to a considerable size over the past few years. Thus the number of foreign workers employed in the Community alone, in 1970, was 3.5 million, or more than double what it was in 1961. Out of this total the number of workers coming from a Community country (mainly Italy) has scarcely varied, remaining below a million. They are a true proletariat, with few skills (in Germany, 75% of foreign workers are unskilled), often ill-paid and ill-housed (in 1969 it was estimated that, in France, 600 000 workers lived in hovels, though they were 20% of the labour force in the building trade!) often even unwelcome. In its guidelines for a "Community Social Programme", the Brussels Commission wrote, in 1971, on this subject: "We have seen the cultural gap widening between immigrant workers and the people of most countries. One finds, in some circles reticence or mistrust in the face of a foreign presence which is regarded as excessive". Foreign workers are often "shock absorbers" for cyclic fluctuations, real nomads of industrial society.

Germany's example is particularly telling in this respect, if we consider variations since 1960 in industrial output and in the net balance of migration:

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Industrial output (in %)	+10.7	+ 6.3	+ 4.5	+ 2.7	+ 8.5	+ 6.3	+ 2.3	—2.4	+ 9.5	+10.4
Net balance of migration (in 000's)	+ 336	+419	+283	+237	+301	+344	+132	—177	+278	+ 572

While the costs of growth are unevenly spread, are its profits more equitably shared out? This is a difficult question to answer, as there are few meaningful figures on the way the distribution of income has evolved.

A first and very global approach is to observe trends in average *per capita* income in a number of countries, for instance those of the European Community, over a given period, for instance 1958 to 1969. If we take the *per capita* average share of the Community product as a starting base of 100, we find the following evolution:

	Germany	France	Italy	Netherlands	Belgium	Luxembourg
1958	110	129	61	85	115	142
1969	111	122	67	96	104	116

These figures show a genuine convergence of average incomes in the Community countries, since in 1958 the largest single gap (between Italy and Luxembourg) was 81 points, whereas in 1969 (this time between Italy and France) it is only 55 points.

But distribution between countries means far less than distribution between social classes. From 1958 to 1970 the national product per gainfully employed person (at constant prices) increased by 70% within the Community. What do we know about the way wage and salary earners, and others, shared out this increase? We must bear in mind not only income trends within each category, but also the numerical strength of each: 7 000 000 more wage and salary earners over this period, and 5 million fewer working on their own account or as part of a family unit. The Brussels Commission has published statistics on average earning per wage or salary earner as a percentage of average income per gainfully employed person in each country if the wage-earner's share is rising, this means he is really "biting" into the revenues of industry and of property taken as a whole. Here are the figures for each country:

	1958	1960	1965	1970
Germany	80.2%	78.5%	80.5%	81.9%
France	81.7%	80.4%	82.9%	80.8%
Italy	88 %	86.7%	87.2%	84.8%
Netherlands	76 %	72.5%	78.7%	81.1%
Belgium	77.8%	76.6%	77.8%	79.6%
Luxembourg	91.9%	83.9%	91.4%	91.7% [1]

Source: Statistics of the European Communities
[1] in 1968

In fact, one does not find (over a twelve-year period!) any significant change. Allowing for unforeseen temporary developments in the economic situation, wage and salary earners have approximately kept their slice of the cake in Germany, France and Luxembourg; they have appreciably increased it in the Netherlands (through the abandonment of the wage controls policy) and to a lesser extent in Belgium, while they have lost ground in Italy, where the "economic miracle" has long been performed on the workers' backs, a fact which is doubtless not unconnected with the aggravation of social tensions in that country over the past four years. However, when considering Italy, we should also bear in mind the disappearance of the poorest peasant holdings, which has had the effect of ap[illegible]ing the average income of other self-employed persons. Anoth[illegible] (quote[illegible] ex) on the same subject, but with a diff[illegible] shows [illegible] ope as a whole, the Common Market [illegible] rel[illegible] nerous to their wage and salary earners [illegible]

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Nor does the trend in wages and salaries by sectors show any appreciable narrowing of gaps in remuneration; on the contrary, in all Community countries, the maximum gap widened between 1964 and 1970:

Maximum gap between hourly rates of workers in the best-paid and worst-paid sectors

(in points, the average for all industries being 100)

	1964	1970
Germany	39	43
France	62	90
Italy	88	95
Netherlands	76	85
Belgium	84	87

Source: Statistics of the European Communities

Regional inequalities also remain very considerable, while tending to narrow down in France and Italy, where they were the greatest, remaining steady in Germany and getting worse in the Netherlands:

Maximum gap between hourly rates of workers, by regions

(in points, the average for each country being 100)

	1964	1970
Germany	22	22
France	33	26
Italy	29	24 [1]
Netherlands [2]	6	10

Source: Statistics of the European Communities.

[1] In 1969.

[2] Gap between North and South Holland, and the Province of Utrecht, on the one hand, and the other provinces taken as a whole, on the other.

As for differences in remuneration between men and women, the Treaty of Rome expressly provided for their disappearance (this was, indeed, one of its few social objectives), but they still continue. A very careful survey made in 1966 (8 years after the Treaty came into effect) by the European Communities found the gap to be, for the textile and food industries, 13% in Italy, 15% in France, 21% in Germany, 22% in Belgium and 28% in the Netherlands.

Little of a specific nature is known about the hierarchy of wages and salaries according to qualifications. However, a study carried out in 1968-69 for the Centre d'Etudes des revenues et des coûts in France has just been published. It gives interesting details starting from surveys made of firms having subsidiaries in different countries, and for which posts could be defined with accuracy.

Range of wages and salaries in 1968–69

	Between the semiskilled worker and executive cadre		Between the average for workers and the average for cadres	
	Ratio before taxation	after taxation	Ratio before taxation	after taxation
Britain	1 : 13.9	1 : 9.4	1 : 3.7	1 : 3
Italy	1 : 12.9	1 : 9.7	1 : 3.7	1 : 3.3
France	1 : 11.7	1 : 8.6	1 : 3.9	1 : 3.5
Netherlands	1 : 11.4	1 : 7	1 : 3.4	1 : 2.9
Germany	1 : 11.2	1 : 8.3	1 : 3	1 : 2.7
U.S.A.	1 : 8.6	1 : 6.9	1 : 2.8	1 : 2.6

Source: Centre d'étude des revenus et des coûts (Paris)

These figures, compared to the average level of remuneration for each country, show that the countries where wages and salaries are highest (especially workers' wages) have the smallest hierarchical differentials—these countries being the United States and Germany. It therefore seems that in France, Italy, Britain and the Netherlands, wages are abnormally low. But taxation systems play a particularly significant part in redistributing incomes in Britain and in the Netherlands—much less so in France and in Italy, which indicates these two countries as the most vulnerable to working-class demands.

For France we have an IRREE study on trends in the differences between the average incomes of extreme categories (in this particular case managerial staff and the liberal professions on the one hand, and the unemployed and retired on the other):

	1956	1962 [1]	1962 [2]	1965
Original income	1 : 9.2	1 : 10.5	1 : 9.9	1 : 9.5
Final income [3]	1 : 5	1 : 5.1	1 : 4.9	1 : 4.4

1 Calculated on the same basis as in 1956
2 Calculated on the same basis as in 1965
3 After deducting tax and adding welfare benefits

The vigorous economic growth in this decade has not led to a closing of the gap between gross incomes; far from it. But some redistribution has been achieved through welfare benefits, far more than through direct taxation.

We now have some facts which bring us to the kernel of this part of our report: economic growth does not dry up the sources of conflict: it multiplies them along with the wealth which, moreover, it cannot of itself share out in a more equitable way.

If we analyse trends in the number of labour disputes in the Community, basing ourselves on the number of working days lost through strikes, we shall find an appreciable rise in tempo over the past few years for most countries (see detailed table in the Annex):

	Germany	France	Italy	Nether-lands	Belgium	Total
1960-1963 (thousands)	1,482	11,562	49,789	538	943	64,314
1964-1967 (thousands)	483	10,202	43,074	118	1,229	55,106
1968-1971 (thousands)	727	107,663	74,611	668	3,452	187,121

Over the past four years there have been twice as many days lost through strikes as over the two preceding four-year periods Even if one leaves the French strikes of May 1968 out of the reckoning (but why should one leave them out?) disputes would still be half as many again as in the earlier periods.

And these are only the traditional disputes between employers and workers, involving labour stoppages that can be identified through statistics. But the claims-staking attitude has extended to other categories beyond the working class, by imitation, first of all (asserting claims is profitable); because the frustration bred by industrial society itself has no cause to stop at the frontiers of the working class; but also because the self-employed (farmers, shopkeepers, craftsmen, doctors) have, in turn, a "boss" to attack—the State, which cannot stand aside from economic life in view of the political importance this has taken on in our societies.

The increase in the size of the conflicts is not, perhaps, the most interesting feature of recent developments. After all, in a country like France, where about 3 000 million wage-earning days are worked each year, even an exceptionally disturbed year such as 1968 only cuts off 100 million days (partly recovered later, it may be added). The forms and objectives of disputes have also developed, and their development is no less significant for the future.

In a paper presented at the 1971 Bruges Week, on industrial relations in Europe, Eugène Descamps (then Secretary-General of the French CFDT) gave a series of practical examples of types of dispute, differing from the traditional strike, taken from France in 1970-71:

(i) sit-in strikes;
(ii) strikes with seizure of plant;
(iii) go-slow strikes (in civil aviation);
(iv) "thrombosis" strikes, involving a small department, but one of vital importance in an enterprise, bringing its whole operation to a standstill, such as a spray-painting workshop in the motor industry or a computer department in steel-making;
(v) guerilla strikes (small, unexpected stoppages recurring at different points in a factory;
(vi) hunger strikes (used by the staff of a large store and by coalface miners) etc.

One of the most remarkable features of these last few years has been the appearance of so-called "wildcat" strikes, started without the approval of the trade union organisations: Limburg miners' strike in Belgium in 1970; Rotterdam port strike, in the Netherlands, in 1970; German steelworkers' strike in the autumn of 1969; in Britain, the phenomenon already dates back a long time, since in 1964-66 there were already 1 700 000 working days lost in 2 171 unofficial strikes, as against 733 000 days lost in 74 official strikes (Report of the Royal Commission on Trade Unions and Employers' Associations); dockers' strike in Gothenburg and miners' strike at Kirnuna in Sweden at the end of 1969.

It is not surprising that these "wildcat" strikes appeared in countries where the wage-earning population is strongly unionized (Belgium 66%, Britain 45%, Netherlands 40%, Germany 36%); similar occurrences are not seen in France, where strikes do not have to be "recognized" by the unions, which are reluctant to play an "official" role, and in which a far smaller proportion of wage-earners are involved (20%).

In fact, every wildcat strike has its own history. But, taken together, and added to a "contesting" mentality which differs from the traditional "claiming" mentality, mean that trade unionism has grown bureaucratic like other forms of social organisation and that it suffers, like all other institutions, from a crisis of authority and of its representative character.

If we consider the history of labour relations since the beginning of the century in all the industrial nations, we shall observe a general trend, through many disputes, towards their institutionalisation. Recognition of the right to strike and of trade union organisation, the elaboration of procedures for collective bargaining, mediation and arbitration, the signing of contracts, consultation with employers' and workers' organizations for the definition of economic

policy, are the main stages in a development which has gradually extended to all Western countries. It was the will of the workers, organised in their trade unions; it was increasingly in the interest of governments, anxious to shield their policy from social unrest, and of industrialists, anxious to fulfil insistent demand and to amortize the increasingly expensive plant required by modern technology. At the same time as it must find outlets by manufacturing its market along with the product it will sell there (this is the role of advertising), the enterprise has to ensure a regular supply of labour by negotiating contracts' with the employees' representatives.

This development found its logical conclusion in top-level coordination to regularize wage movements as such—this took place in the Netherlands until the sixties and in Britain under the Wilson government. The incomes policy was the culminating point of coordination between trade unions and the authorities. It was so advanced, in fact, that the position could not be held. France, which was some way behind other industrialized countries as regards labour relations, has made up part of this leeway since the 1968 crisis: the so-called "contractual policy" of the Chaban-Delmas government exemplifies how it is closing the gap.

Only, at the same time as this process of the institutionalisation of disputes was going on, there has also emerged another process of denial of authority (including trade union authority) and radical criticism of the whole system of economic and social organisation. It is the superposition of the two movements (for the second has not caused the first to disappear, even if it has slowed it down) that typifies the present stage of industrial relations.

We must of course make a careful distinction between the situation in different countries. Radical contestation is weaker in Northern Europe than in the Latin countries (France and Italy), which did not prevent wildcat strikes from developing in countries that were supposed to be calm and disciplined. There are, however, some common features, and in particular, the following: the increasing importance of working conditions in the outbreak of disputes (there again, demands for better working conditions, particularly on assembly lines, have not done away with wage claims) and the transfer of the claiming power from the level of the industry to that of the enterprise. One of the reasons why unions have been caught off balance in recent disputes is precisely the fact that they are organised mainly at industry level: it is on this level that they negotiate. But, from now on, claims are increasingly being pressed at enterprise level; that is where the wage-earner feels most intensely the weight of working conditions, which he finds all the harder to bear because he has acquired, through education, unused abilities or frustrated desires. The same fact of mass education which was, at an earlier stage, a decisive condition of growth, may, beyond a certain level, compel a change in the type of growth. It is well that the semi-skilled worker should be able to read and count, but if he knows more, he will no longer want to be a semi-skilled worker. What the

worker is ever less ready to accept is not his wage (though he always wants it increased and, for the boss, increasing it is often a way of getting the other claims off his back); it is the deadening effect of uninteresting work and submission to the authoritarianism of the "petty boss" in the workshop.

Technological progress has by no means brought about the end of repetitive work. The labourer-tradesman couple of the first stage of industrialisation has been replaced by a semi-skilled worker-technician combination, in which the mass of semi-skilled workers shows absolutely no tendency to decrease.

But this wage-earner in the workshop has become aware of his strength at the same time as he felt the need to shake off his condition. His strength lies in the increasing complexity of the enterprise. Each of its wheels controls many others; the enterprise must not stop if it wants to get returns on its increasingly expensive machinery; moreover, with improved management, it carries less and less stock; it is therefore more vulnerable. Hence it is no longer necessary to mobilise the mass of wage-earners in a whole industry—a task for which the union remains irreplaceable—in order to have a chance of successfully pressing a claim. It is enough to act at the right time in the right place.

This development may have very important consequences for the future. We are seeing an "atomisation" of labour disputes: each is going to fight on his own, with his own weapons and targets. It will be necessary to negotiate much more at enterprise level; but heads of enterprises have got into the habit of sheltering before their professional organisations' specialist advisers. This will no longer be possible. They will have to go out and negotiate themselves, and prepare themselves accordingly. At the highest level in a firm, it will be necessary to change the order of priorities and sometimes devote more time to settling a problem of the organisation of work than to settling an investment problem.

For the unions, the consequences are no less hazardous. They already had trickly problems of homogeneity and compatibility due to the increase in the number of workers they were called to organise: for the Community as a whole, the proportion of wage and salary earners has gone up from 68% of the gainfully employed population in 1958 to 78% today. Within the ranks of the wage and salary earners, workers are losing their preponderance but the organisations remain stamped by their working-class tradition. An uneasy compatibility will have to be maintained between workers, white collar staff, technicians and cadres, each with a distinctive mentality and with distinctive claims.

At the same time as it is asked by the government to negotiate at the summit, the trade union is therefore drawn by its grass roots towards a variety of actions. It must therefore hold the authorities off at arm's length. It may do this by publicizing its political opposition to the government or by proclaiming its

condemnation of the capitalist system but it may then find itself in difficulties with another facet of the lack of uniformity among its troops, namely their *political diversity. With over 80% of the population wage-earning or salaried, it* includes conservatives and progressives together; one must then try not to frighten away the one in order to please the others.

So the social struggle becomes more intense at the same time as it becomes more diversified and, in some ways, more radical. It poses new problems, of considerable importance for the future of growth; in particular, problems of power and of social consensus.

C—The future of growth

To a Frenchman, discussions on the future of growth are evolving at a disconcerting speed. Two years ago, when the VIth Plan was under consideration, all the talk was of "Japanese-style growth", and rates of expansion between 6% and 8% per annum were being mentioned for France; today the work done by the "Club of Rome", and American theses on the blessings of "zero growth" are becoming fashionable themes. It is clear that mankind cannot go on indefinitely increasing its numbers by 2% per annum and its output by 5%; that is, as is happening today, doubling its population every thirty years and its production every fifteen years. This would lead to grossly unreasonable figures: 28 000 million human beings on Earth in 2060 (ten times more than a century earlier); world production of 200 000 million dollars at the same date (seventy times the present figure)! The experts of the Massachusetts Institute of Technology can readily prove that food resources and the raw materials of industry will be exhausted long before, and even if that is not the case, growth will have choked to death through the pollution of the natural elements: our biosphere has but a limited capacity to recycle the waste products of our affluence. So much for that.

But we do not know even the approximate limits of this capacity. Similarly, we do not know if the relation between production and pollution is a constant. Indeed there are good reasons for believing that it is not, for everything depends on the density of production; if it were better distributed over the world as a whole, Nature's capacity for absorption would be far better used; when one-third of the world's production takes place in one small part of the territory of a single country, the United States, we must not be surprised at a breakdown in the ecological balance. At the same time, experience shows that a higher standard of living leads to a decrease in fertility. The economic and social development of the Third World could therefore have positive effects in this connection. Now if we start from the hypothesis that population would only grow slowly beyond 10 000 million people (still three times today's figure), in order to give each of these people the present-day standard of living of an American, world production of 50 000 million dollars would be required,

that is seventeen times more than today. This figure would be reached half-way through the 21st century (children born this year would see it with their own eyes) with an annual growth rate reduced to 3.5% per annum. But there may be variations depending on changes in the distribution of growth. One per cent growth in the American economy represents 10 000 million dollars a year distributed among 200 million people; but this same sum of money, applied to the Third World, would represent a growth rate in excess of 2% for over 2000 million people.

These calculations make no claim to be scientific, but they indicate orders of magnitude which are not as close to Doomsday as those often used to justify a neo-Malthusianism that is particularly advantageous to well-heeled nations. What a temptation it is to close the ticket-gates of progress behind us, explaining to the Third World and to the poor in our own countries that a car, a television set and a bathroom are enough to make men happy and to justify them in ceasing to misuse nature, so that they can hear Bach undisturbed!

Growth certainly cannot go on forever, and it will slow down appreciably in the next hundred years. It is not too soon to start thinking about it. But for the next twenty years it is not likely to die of scarcity or asphyxia. Its continuance, in the European countries, depends on a series of cultural, social and political conditions; for we have seen these were the conditions that gave rise to growth, in the same way as the consequences of growth themselves take cultural, social and political forms.

1. *Cultural conditions*

The mainspring of economic development, for the past hundred years, has been the spread of education and specifically of primary education. We may wonder whether universal secondary education and the very rapid spread of higher education will not have the opposite effect. The forms of industrialisation that were suited to a primary-educated population may no longer be acceptable to a secondary-educated population, which has new requirements as regards working conditions and types of authority, while the apparatus of production and the style of command only progress slowly. This is a reason for thinking that the "education explosion" (which we cannot expect to stop, for it has become a need in itself and is, moreover, essential in order to keep up our technological standards) will not necessarily have the same effects on growth as the first stage of universal primary education.

Moreover the existence of comparative affluence among some classes of the population, and specifically among those who possess knowledge and inherit power, alters their scales of values. The generations that have not known scarcity do not react like those that recall it. They take the motorcar and the washing machine for granted (and have no intention of doing without them) but do not regard them as achievements. Saving, work, rational action become secondary values when set beside others, such as enjoyment, leisure and amenity. The classical age of industrialisation gives way to the Romantic

period of a new sensitivity. Not to mention the fact that human nature may stifle in an excessively rational universe. People may take orders from an authoritarian boss and achieve psychological liberation by counting him as one of many stupid dictators, but if standards of behaviour are imposed on them in their work or in their life in the name of logic and cold reason alone, the situation may become intolerable because there is no longer any excuse for refusing to obey. The dictatorship of an organisation is in consequence far harder to bear than that of a boss. One therefore has to devise forms of organisation which preserve irrational areas, as one might designate national parks and pedestrian precincts.

There is at the very heart of industrial society a basic contradiction, that which rends man apart between the increasingly demanding rationalisation imposed on him as a producer, and the appeal to his most anarchical and luxurious tastes as a consumer. The system requires the same man to live eight hours each day under the dictatorship of reason, and for the rest of the time to yield to all his most chaotic impulses. What sort of willpower is he expected to have, in order to imprison these instincts at the very moment when he crosses the threshold of his factory! We should not wonder that people feel confused today, just as an employer should not be surprised when his workers ask for a rise, while he is himself putting posters up at the factory gates urging these same workers to holiday in Majorca or buy another car . . .

2. *Social conditions*

Among factors that will encourage growth to continue in Europe for the next ten or twenty years, we should mention the quantity of unfulfilled material needs, still felt by a large part of the population. The average standard of living of an Englishman, a German or a Frenchman still remains 20% below that of a Swede; the gap between the latter's standard of living and that of an Italian is as wide as 40% (according to an estimate made by André Piatiers, Director of the Ecole pratique des Hautes Etudes in Paris). If we define relative poverty in European countries as the level of income which does not allow a family to buy consumer durables, it is estimated that 14% of Frenchmen and 19% of Italians still fall short of this standard. But if overall growth is slowing down, this means the lot of those who are worse off can only be improved by trimming down the style of life of those who are better off. Any slowing down of growth, at this stage, will contribute to social conflict.

In a more general way we may consider that unskilled workers (the largest group), many farmers, most foreign workers and a high proportion of those who have retired live under conditions which they rightly feel to be intolerable, when they see the conquest of outer space, heart transplants and supersonic flight. To this general deprivation may be added more specific areas of frustration for larger sections of the population, for instance as regards transport: it was President Nixon himself who wondered why it was easier to send three men to the Moon than to resolve the traffic problems of a city.

Another element which is helpful to growth in Europe is the existence of a reserve army of workers in the agricultural sector. They will continue to supply manpower for the other sectors of the economy over the next ten years or so. Thereafter this pool of labour will doubtless run dry.

On the other hand, the aspiration to enjoy greater opportunities for well-being will undoubtedly lead to a reduction in working hours (for all types of work) which will be greater over the next ten years than it has been over the last ten.

Finally, it is difficult to foresee what impact the inevitable intensification of social stresses will have on growth. We have already seen that existing procedures for the institutionalisation of disputes (which are conducted at General Staff level) may no longer be appropriate for settling new forms of disputes, which are more localized at factory or even shop floor level, and which are also more violent. This decentralisation of conflicts will be at the expense of the trade union apparatus, which will therefore stand further back from employers and government authorities, in order to maintain contact with the grass roots. It would be vain to count on the unions to keep the workers under control at all times.

In addition to changes in the level at which disputes take place, there will be changes in their nature. Along with demands for remuneration, there are now those which have to do with status and power. Some, of course (the Communists among them) see the transfer of power (common ownership of the means of production) as a necessary and sufficient condition to improve the distribution of wealth. Others, who are often lumped together as "Leftists", do not think in terms of claiming power, but of resisting it in order to weaken it, because they feel it is intolerable from the standpoint of human liberty; their real objective is not to take it over but to bring it down. Finally there are those who demand change, not only to transfer power to social classes which did not have it before, but to exercise it in a different way (this view is found, especially, among the proponents of workers' control).

In fact the exercise of authority within the firm will inevitably pose basic problems over the next few years. There cannot continue to be an ever-widening gap between the size of the social responsibilities which the firm assumes and the narrow basis of consent on which its legitimacy rests. With concentration of industry and the appearance of multi-national corporations, we are beginning to see clusters of firms which provide a living for hundreds of thousands of workers, which serve the needs of millions and whose decisions carry greater weight than those of the State in the social and economic balance of a nation. In our system today, these super-powers have no legal constitutions other than those arising from the right of property; this right, on its own, makes them legitimate even if, as in most cases, the owner no longer exercises power but delegates it to specialist groups recruited by cooption. This brings about an imbalance, which will not be tolerated much longer, between respon-

sibility and legitimacy, all the more so now that there is the beginning of a trend towards the assumption by firms of new social responsibilities: in the United States, public opinion is urging them to take an interest in the fight against pollution and in the education of racial minorities. The nations will think in the end, as once they did with their kings, that too much power has been entrusted to men who are not accountable to them.

If social conflicts become sharper, can they endanger the very fabric of social life? May not this fabric be rent asunder? This is a fearful question, especially for the proponents of European unity In a way, this unity answers a deeply-felt need to divide power, so as to make it more bearable. Instead of the traditional but no longer appropriate division of power between executive, legislature and judiciary, we have, so to speak, a new division. This shares out power between the new European authority and the old national authorities, which will not disappear, even if they delegate part of their responsibilities to it. However, this delegation weakens the old national fabric, which is the one that has to withstand the stresses imposed by social conflict. If it were no longer possible, in a grave crisis, to appeal to national loyalty in order to overcome a conflict that could no longer be settled at the level of the interested parties, might this not lead to the dissolution of society as a homogeneous social body? Unless one finds, as a substitute fabric, a religion (Christianity once played this part) or an ideology (Communism may serve that purpose in some countries today). But this involves the danger of re-creating secular religions, that is, new totalitarianisms.

3. *Political conditions*

Among the political factors which will remain favourable to growth over the next few years, we should mention the possibilities of refining economic policies. We have not exhausted all the resources of a delicate day-to-day management of the economy. Beside monetary and budgetary policies, which can be appreciably improved in the framework of European union, there is still the prices and incomes policy, as yet in its infancy. Of course, the foreseeable trend towards a weakening of the concert between government, employers' associations and trade unions will not make it any the easier to apply an incomes policy. But such policies may enjoy a new lease of life if we restore the second of their objectives (the first being the fight against inflation, which alone has been considered up till now), that is, the social objective of a fairer distribution of wealth. Incomes policy must here be combined with tax reforms.

Another helpful factor is that Governments have to mobilise nations through economic and social ambitions, since territorial ambitions are ruled out by the balance of nuclear power, so long as this lasts (with the inevitable spread of nuclear weapons, the risk of conflict is bound to increase). In Communist countries, the demand for political and cultural freedom may of course provide other themes for political debate; but this would put the existing system in these countries to such risk that we may expect their governments to try and keep economic and social objectives in the forefront.

The internal difficulties of Communist countries and of American society, o the other hand, will weaken other political factors hitherto favourable t growth. The Communist challenge may no longer be so great an incentive, i so far as the Communist block brings out into the open its dissensions (Sinc Soviet confrontation) and its difficulties (possibility of a grave crisis in severa East European countries, and particularly in Yugoslavia). As for the Unite States, rent by doubts about their own system, they will no longer provide th reassuring example which one may follow in order to make a success of in dustrialisation. Europe, in her turn, will have to strike out into the unknown try out her own experiments, that is, take additional risks. A great opportunit is open to her, but at a price: are the Europeans ready to pay it? Furthermore the "agonizing reappraisal" of American policy, which we are now witness ing, will have negative effects on growth. The world monetary system, with the dollar as a dominant currency, had every possible drawback, but it was a system, and therefore reassuring. It is breaking down. There is nothing to prove that it will be replaced by an equally safe system; in any event, the creation of a European currency will not by itself achieve this result. In the present state of the relationship between political forces, it is more likely that we shall move towards a division of the world economy into two or three large areas (European area, dollar area, possibly Japanese area) than towards the establishment of a new monetary system managed by an international institution.

The Americans no longer want to be the world's managers, because they are no longer accepted as such and because this now costs them more than it is worth. But this does not mean that they have accepted subjection to a common rule, applicable to them as to other countries. They will strive for a long time yet to keep their former advantages without having to bear the cost. This is a lasting focus of infection between the two Atlantic dreams. It may also be a spur to the achievement of European union, which needs a foil in order to progress: in so far as fear of the Communists has weakened, opposition to America must play this part.

To make up for these negative political factors, we must therefore greatly strengthen European unity, whose effects will soon wear off if it remains a mere customs union. And we still have to give the Community a political form of its own. In our industrialised societies, political systems fulfil three main functions—a management function; an ideological function; a representative function. Let us briefly consider how a European Political Community might make out in each of these functions.

Management function

This is the simplest, and the one that is likely to benefit most from the existence of a European community. For such a Community implies political power being placed on the level of the problems which have to be resolved; solutions to these problems, whether of regulating the day-to-day economic situation, organising public sector investments, social reforms or development aid, will be increasingly beyond it if it remains at the level of small or

medium-sized countries. As an instrument of management, the Community will thus have effects that are favourable to growth, but to achieve them, it will require a political will which it lacks today; in other words it must rest on popular consent.

Ideological function

A governing power cannot confine itself to managing society. It draws the authority, which it requires for this management function itself, from its ability to mobilise the people for purposes that go beyond the scope of management. Now we have seen that industrial society was raising more and more problems of purpose, as it settled its problems of organisation. Of course, a democratic government is not expected to define a charter of doctrines, imposed like a State religion on all its citizens. But it must, in its decisions, consider to what scale of values its options implicitly or explicitly relate. The capitalist system gives priority to values that are conducive to efficiency; the communist system more often refers to values connected with solidarity. This is not to say that either system has entirely forsaken the values which are typical of the other: the East does not neglect productivity and management; social security and progressive taxation are not unknown in the West. It remains that the Communist economic system is less efficient than capitalism, because it denies itself the right, for instance, to dismiss workers, because it maintains a narrower range of incomes and because it only makes sparing use of the profit motive. The opposite holds true of the capitalist system, whose greater productivity is bought at the price of greater insecurity and less equality. The choice is between an equitable distribution of poverty or a clear run for injustice in the midst of plenty; each system has its virtues and its vices.

Efficiency and solidarity are only two virtues among many. We have seen the growing importance of a third—responsibility. Now neither communism nor capitalism has so far succeeded in spreading it wider, except through legal fictions, which are only fictions. In speaking of responsibility, we mean the responsibility of people in their organisations, and that of organisations towards the people they employ, and as regards their cultural and natural environment. The fight against pollution, for instance, is part of the scope of responsibility, as much as the spread of power within the firm.

Finally, a fourth value is taking on increasing importance, especially for youth: this is personality, which differs from responsibility without being too far removed from it. We could express it as follows: the industrial system has overstressed one single aspect of the individual, namely his capacity for adapting to the system itself. Every man is judged on his productivity or on his professional status. In other words, industrial society has imposed its hierarchy and its criteria of selection. Now we see an increasing desire to dissociate professional and social hierarchies, with people no longer judged on the cubic capacity of their cars, their position in the firm or the size of their bank account.

We do not know what practical forms this new aspiration will take: narrowing down of the range of incomes, greater rotation of duties, a decline in the prestige of hierarchical authority. Everything is possible; nothing is settled. But it is certain that future political decisions will have to take these problems into account. We are already seeing in outline alternative patterns for growth: some more concerned with personal consumption, others directed towards productive investments and others again towards public utilities. A clearer definition of each of these models is becoming a matter of urgency, for tomorrow the issue at stake will no longer be that of choosing a growth rate but of deciding on a type of growth. This is essentially a political decision.

Representative function

Western democracies claim as their distinctive feature the rotation of office between different political parties. In turn, the major classes of the population feel they are represented in the government and thus concerned by what happens to all. Thus we see enlightened conservatives and reformist socialists alternating in office in most countries, even if their style of management differs less than their programmes, this rotation has a virtue of its own; it causes the different social classes to have a share in political power. Of course, in some Scandinavian countries, the Socialists are permanently in control politically, but the conservative make up for it by retaining in their own hands the economic power whose political implications have already been set out in this report. The situation is more dangerous in countries (such as France) where enlightened conservatism is permanently entrenched in office, for there the same social classes hold economic and political power. This may lead to social alienation of the others.

The risk is all the greater in that the opposition seems to have given up hope of office, either because its goal is to weaken authority rather than to wield it (some "Leftists" think along such lines) or because, while the present stage of industrialisation, with all its stresses and strains, had to be completed, one prefers all things considered, to leave it to the Right.

The progressive establishment of a political Community will very quickly run up against this difference of approach between the reformist Left of Northern Europe and the revolutionary Left of the South.

A European "government" will therefore improve the efficiency of the management function, while encountering new difficulties in the ideological and representative functions. The choice of a new model for growth may provide the occasion for a realignment of forces, but it would first have to become the specific theme of a political debate. In any event the new institutions will not by themselves be enough to make a political Europe come alive; the confrontation of forces will also have to take place at this level.

If we wanted to sum up the factors which help or hinder continued growth in Europe, over the next ten years, we could draw up the following table:

(a) *Helpful factors*: the existence of a pool of labour in agriculture; the possibility of refining economic policies and of making them more effective, if a real economic and monetary union is set up in Europe; the fact that political ambitions remain centred in the social and economic field; a balance of positive effects arising from the enlargement of markets and improved management of firms.

(b) *Unhelpful factors*: an increase in social tensions; progressive change in the scale of accepted values; the crisis of the American model; subdivision of the world economy; weakening of the Communist challenge

Some of these unfavourable factors, however, may become more favourable if we make new types of growth our aim, rather than achievement of the highest rate of growth; and in particular if a substantial share of the human and financial resources mobilised for technological change over the past century is used instead for social change. It is incidentally highly probable that, if this transfer of resources is not made, growth will come to a standstill. The choice thus seems to be one between growth of the present type at a rate of 5%, with the risk of a sudden halt, and growth at a slower rate (4%?) but of a different type involving less risk of seizure.

A new forward leap of European union is only one of the requirements for continuing growth; a necessary condition but not a sufficient one, which will not absolve us from making difficult choices as to patterns of growth. These choices will be dictated by the relationship between political forces.

Development of the industrial Economics since the beginning of the century
(Annual growth rates in %)

	France	Germany	U.S.A.	Italy	Britain
Total production					
1896–1929	+ 1.7	—	+ 4.2	+ 2.1	+ 1
1929–1963	+ 2.1	—	+ 3	+ 2.7	+ 2.1
1949–1963	+ 4.6	+ 7.8	+ 3.8	+ 5.8	+ 2.6
Production per capita					
1896–1929	+ 1.5	+ 1.3	+ 2.1	+ 1.3	+ 0.5
1929–1963	+ 1.7	+ 2.1	+ 1.7	+ 2	+ 1.6
1949–1963	+ 3.7	+ 6.1	+ 2.1	+ 5.1	+ 2.1
Production per gainfully employed person					
1896–1929	+ 1.5	+ 1	+ 1.8	+ 1.4	+ 0.6
1929–1963	+ 2.2	+ 2.4	+ 1.9	+ 2.9	+ 1.3
1949–1963	+ 4.4	+ 5.3	+ 2.5	+ 4.9	+ 2

Source: National studies of the Social Service Research Council project (quoted in '*La Croissance française*' by J.J. Carré, P. Dubois, E. Malinvaud, published by Editions du Seuil).

World distribution of wealth

(in %)

	Population		Gross internal product		Industrial production	
	1950	1969	1950	1969	1950	1969
Europe (altogether)	31	26	37	41	39	48
United States	8	7	41	35	45	33
Other developed countries[1]	6	6	7	10	7	9
Under-developed countries[2]	55	61	15	14	9	10
World	100	100	100	100	100	100

Source United Nations
1 Canada, Japan, Australia, South Africa
2 Not including China

The sources of growth
(annual rates for 1955–1962)

	U.S.A.	France	Germany	Italy	Britain
Growth in national income	+ 3%	+ 4.82%	+ 5.39%	+ 5.78%	+ 2.56%
Labour factor	+ 1.22%	+ 1.35%	+ 1.60%	+ 2.12%	+ 0.44%
(of which)					
working population	+ 0.73%	+ 0.09%	+ 1.13%	+ 0.20%	+ 0.37%
working hours	— 0.20%	— 0.06%	— 0.45%	+ 0.03%	— 0.30%
age and sex distribution	— 0.08%	+ 0.12%	+ 0.15%	+ 0.05%	— 0.02%
workers' qualifications	+ 0.52%	+ 0.29%	+ 0.11%	+ 0.40%	+ 0.30%
migration from rural areas	+ 0.25%	+ 0.91%	+ 0.66%	+ 1.44%	+ 0.09%
Capital factor	+ 0.73%	+ 0.84%	+ 1.57%	+ 0.80%	+ 0.80%
(of which)					
productive capital	+ 0.42%	+ 0.79%	+ 1.46%	+ 0.74%	+ 0.57%
invested capital	+ 0.25%	+ 0.03%	+ 0.16%	+ 0.11%	+ 0.06%
foreign investments	+ 0.06%	+ 0.02%	— 0.05%	— 0.05%	+ 0.17%
Size factor	+ 0.30%	+ 1.07%	+ 1.35%	+ 1.56%	+ 0.45%
(of which)					
increasing output	+ 0.30%	+ 0.54%	+ 0.55%	+ 0.60%	+ 0.28%
price structures	0	+ 0.46%	+ 0.70%	+ 0.80%	+ 0.15%
opening of frontiers	0	+ 0.07%	+ 0.10%	+ 0.16%	+ 0.02%
Residual factor	+ 0.76%	+ 1.56%	+ 0.87%	+ 1.30%	+ 0.87%

Source: Denison et Poullier, *Why Growth Rates Differ*. The Brookings Institution.

The standard of living
about 1967–'68

	Germany	France	Italy	Nether-lands	Belgium	U.K.	U.S.A.
Housing							
Number of people to a room	0.88	1.01	1.14	0.76	0.62	0.67	0.59
Health (per 100 000 inhabitants)							
Doctors	148	118	171	114	151	115	158
Hospital beds	1 084	1 120	985	714	827	994	840
Equipment (per 1 000 inhabitants)							
Telephone	172	140	135	216	181	218	523
Car	199	223	151	165	187	196	410
Television	231	167	146	197	186	263	392
Education							
Students (out of 1 000 people in the 20–24 age group)	82	169	80	165	128	110	404

Source Statistics of the European Communities

(grading of countries according to certain social indicators)

	Population density	Divorce	Early marriage	Ratio of doctors to population	Traffic deaths	Murders	Infant mortality	Car density	17-year olds still at school	Homes with bathroom	Ratio of telephones to population	Taxation on incomes above 2 000 p.a.	Provisional grading
U.S.A.	— 1	— 8	+ 8	+ 3	— 5	— 8	— 5	+ 8	+ 8	+ 7	+ 8	— 1	+ 14
Australia	0	— 4	+ 6	+ 7	— 7	— 6	— 3	+ 7	+ 2	+ 8	+ 4	— 6	+ 8
U.K.	— 4	— 5	+ 7	+ 5	0	— 1	— 4	+ 4	+ 1	+ 6	+ 7	— 8	+ 8
France	— 2	— 3	+ 4	+ 4	— 6	— 3	— 2	+ 6	+ 5	+ 2	+ 1	0	+ 6
Netherlands	— 7	— 1	+ 1	+ 6	— 3	0	0	+ 2	+ 4	+ 1	+ 5	— 3	+ 5
Japan	— 6	— 6	0	+ 8	— 1	— 7	— 1	0	+ 7	+ 5	+ 3	— 2	0
Belgium	— 8	— 2	+ 5	+ 2	— 4	— 2	— 6	+ 3	+ 6	0	+ 2	— 4	— 8
Italy	— 3	0	+ 2	0	— 2	— 4	— 8	+ 1	+ 3	+ 3	0	— 7	— 15
W. Germany	— 5	— 7	+ 3	+ 1	— 8	— 5	— 7	+ 5	0	+ 4	+ 6	— 5	— 18

'*The Economist*' recently published an order of merit of the main industrial countries, established on the basis of a few social indicators. Countries are graded from 0 to + 8 or — 8 depending on the indicator that has been selected. Thus a low population density is considered as contributing to the quality of life, and a high density as a negative element. It will be seen that the English-speaking countries lead in the final order; the Common Market countries come out rather badly.

Share of wages in national income
(Percentage trends from 1950–54 to 1960–64)

	Change in the share of wages as part of national income	Change in the share of wage-earners as part of the population	Balance
Belgium	5.1	1.5	+ 3.6
Norway	8.8	5.5	+ 3.3
Sweden	8.8	5.7	+ 3.1
Denmark	5.4	2.9	+ 2.5
U.K.	2	0.8	+ 1.2
Ireland	2.3	2.4	— 0.1
France	4.8	6.4	— 1.6
Germany	4.2	6	— 1.8
Italy	5.4	7.2	— 1.8
Netherlands	6.6	8.8	— 2.2
Switzerland	0.9	5.1	— 4.2
Austria	3.6	8.4	— 4.8
Combined	4.8	5.1	— 0.3

Source: OECD

ANNEX VII

Employment trends in the European Community

	1955	1960	1965	1970
Agriculture	24.3%	19.6%	15.9%	13.4%
Industry	40 %	42.4%	43.5%	43.9%
Services	35.7%	38 %	40.6%	42.7%

Source: Statistics of the European Communities

Wage and salary earners
(as a percentage of the gainfully employed population)

	1960	1970	1975
Germany	77 %	82.6%	84.3%
France	70.1%	77.9%	81.1%
Italy	59.4%	68.4%	71.7%
Netherlands	78.8%	83.7%	85.5%
Belgium	76.5%	81.2%	83 %
Luxembourg	70.5%	76.4%	79.1%

Source: Statistics of the European Communities

Labour disputes in the common market

(Working days lost through strikes, in thousands)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 [2]
Germany	88	65	451	878	17	49	27	390	25	249	93	360
France	1 070	2 600	1 901	5 991	2 497	979	2 523	4 203	100 000 [1]	2 223	1 740	3 700
Italy	5 786	9 891	22 717	11 395	13 089	6 943	14 474	8 568	9 240	37 825	18 276	9 270
Netherlands	467	25	9	37	44	55	13	6	14	22	262	370
Belgium	334	92	270	247	444	70	533	182	364	162	1 426	500
Total	7 745	12 653	25 348	18 548	16 091	8 096	17 570	13 349	109 643	40 481	21 797	14 200

Source: Statistics of the European Communities

[1] Estimate

[2] First eight months

Recent trends in growth
(annual rates)

	Average for 1958–59 to 1968–69	1970	1971[1]	1972[1]
Original members of the Common Market				
France	+ 5.7	+ 5.9	+ 5.5	+ 4.5
Germany	+ 5.1	+ 5.4	+ 3.5	+ 1.5
Italy	+ 5.7	+ 5.2	+ 0.5	+ 3
Belgium	+ 4.7	+ 6.1	+ 3.75	+ 3
Netherlands	+ 5.3	+ 6	+ 5	+ 2
New members of the Common Market				
Britain	+ 3.1	+ 2.2	+ 1	+ 4
Norway	+ 4.8	+ 3.5	+ 5.25	+ 3.5
Ireland	+ 4.2	+ 1.5	+ 3	+ 3.5
Denmark	+ 4.9	+ 3.2	+ 2	+ 2.2
Other countries				
U.S.A.	+ 4.5	— 0.7	+ 3	+ 5
Japan	+ 11.2	+ 10.7	+ 6.1	+ 6

Source: OECD to 1970
1 OECD, EEC and national estimates and forecasts for 1971 and 1972.

Growth prospects
(annual rates)

	1970–1975			1975–1980		
	Employment	Productivity	Production	Employment	Productivity	Production
Original members of the Common Market						
France	+ 0.5	+ 5.4	+ 5.9	+ 0.7	+ 5.4	+ 6.1
Germany	+ 0.2	+ 4.4	+ 4.6	+ 0.2	+ 4.5	+ 4.7
Italy	+ 0.8	+ 4.7	+ 5.5	+ 0.7	+ 4.8	+ 5.7
Belgium	+ 0.7	+ 4	+ 4.8	+ 0.5	+ 4	+ 4.6
Netherlands	+ 1	+ 3.7	+ 4.7	+ 1	+ 3.5	+ 4.5
Luxembourg	—	—	+ 3	—	—	+ 3
New members of the Common Market						
Britain	— 0.1	+ 2.9	+ 2.8	+ 0.6	+ 2.9	+ 3.5
Norway	+ 0.4	+ 4.1	+ 4.5	+ 0.3	+ 4	+ 4.3
Ireland	+ 0.7	+ 4	+ 4.7	+ 0.7	+ 4.1	+ 4.9
Denmark	+ 0.1	+ 3.7	+ 3.8	+ 0.1	+ 3.7	+ 3.8
Other countries						
U.S.A.	+ 1.7	+ 3.2	+ 4.9	+ 1.6	+ 2.8	+ 4.5
Japan	+ 1	+ 9.4	+ 10.5	+ 1	+ 8.4	+ 9.5

Source: OECD: '*Growth in production 1960–1980*' published in December 1970

MAN IN RELATION TO THE FIRM

by

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MAN IN RELATION TO THE FIRM (*)

O. A. FRIEDRICH

Introduction

This conference, in accordance with the preparatory reflections of those participating, is to address itself to the task of bringing out the connections, at Community level, between various economic, social and political problems and the advance of industry. The theme of the conference, "Man in relation to the firm", will therefore have to take in a number of crucial points to bring out the connection between social and industrial developments. The starting point, consequently, of what I propose to say is firstly the attitude of industry in Europe to the Community's industry policy and secondly the views of employers on the road to be followed by social policies in Europe. I propose, to begin with, to touch briefly on these two issues in a general way.

Industry policy, in the view of the Union of European Industrialists (UNICE) and as set out in UNICE statements of 10 September 1970 and 1 June 1971, is to be regarded as a collection of measures for the creation in all fields of the best conditions for an optimum expansion of firms in industry. I am not forgetting that Community industry policy has also the task of deepening the general awareness of the need of industrial advance but a first endeavour of that policy must be to improve the possibilities for industry to seize and make use of the abundant openings arising from the creation of a wider market in order to remain abreast of its task of supplying goods to people in the best possible conditions. The contribution of industry to the gross national product being as big as it is, the creation of favourable conditions for smooth and rational production is a matter of the highest importance for economic expansion in the Common Market as a whole. Successful advance in industry is an unalterable condition of economic and social progress in the Community. However, an industry policy directed to this end is not to be conceived of, and the employers have repeatedly drawn attention to this point, as a policy of intervening in and meddling with the decisions of entrepreneurs. It must be an all-embracing policy and one adjusted to the state of things in our market economy. The main endeavour of Community industry policy must therefore be the improvement of the framework of conditions in which firms in the Common Market work.

The close connection between industry policy and the other joint policies, in particular social policy, is plain to see, for the aim of industry policy after all is a general improvement in living conditions in the Community. It is also the

(*) Translated from the German

task which the Member States set themselves in the preamble to establishing the European Economic Community, namely "the cc provement of the living and working conditions of their peoples as a objective".

The close connection between the objectives sought after in other fie means being used and, on the other hand, the Community's indu involves as a matter of course mutual adjustments and coordinatic industry policy has its repercussions on social policy, in the same are connections between measures taken under social policy and under industry policy. There connections were the subject of a analysis by the Commission in 1969 in the so-called "Interim Rep Council on the correlations between social policy and other C policies".

Here indeed a danger comes into view and one that is not to be los The sights of industry policy are directed to a section only of the namely industry itself. Social policy by its very nature cannot and concern one section of the economy alone, it must be all-embracing. policy worthy of the name must aim at the improvement of working a conditions of all workers and not only those in industry. A properly un social policy must indeed also ask itself whether it is right and consist the principle of the greatest possible measure of freedom to pursue tinuous extension of collective care and continuous increases in social benefits while the real incomes of all levels of the population steadily c to increase. We are of the view that community benefits, financed b pulsory contributions or taxation, should as a matter of principle play secondary role, that is they should only play a part when the person co is not in a position to help himself. Social policy must not lose sight of w economy as a whole is capable of. This capacity is the source but at t time the limit of every endeavour of social policy. A successful industry strengthening and benefiting the whole economy, also creates the grou for higher social-security benefits being paid.

I—THE POSSIBILITIES FOR A EUROPEAN SOCIAL POLICY

A—Governments as autonomous operators

I shall follow these basic remarks on industry policy and its connecti social policy with a brief statement on employers' views on the possibi a European social policy, since they are the basis and cause of our att the crucial issues. Since the EEC was set up, whenever European socia was under discussion there have been constant debates on whether ar how far harmonization of the social policies of the individual Membe was necessary and what the Commission should do in the matter. In t

repeated attempts have been made to read more into the text of the EEC Treaty, which after all is clear enough, than is to be found there. There can be no doubt at all that the Treaty as a matter of principle leaves competency and sovereignty in matters of social policy with the Member States. The cooperation of Member States called for in Article 117 therefore is essentially based on the voluntary principle. But this is in no way to be looked upon as a shortcoming. The Treaty here is merely taking account of the fact that a joint social policy can only be brought into being with consideration being given to the circumstances of social affairs in their great variety and as they have grown up in time past and the further fact that in 1957 the Member States with that in mind were not prepared to transfer to the Community the political responsibility for the further development of social policy. There has been little change in the meantime in this initial position. Even today, with more than a decade gone by, social-security benefits in the EEC countries show considerable national or regional differentiation for reasons of preference which are largely rooted in history. An example of the varying emphasis of countries' social policies can be found in the fact that in Federal Germany high priority is given to old-age and sickness insurance while social policy in France is marked by a purposeful policy in favour of the family with a high level of benefits. These differences have been influenced by the varying social circumstances and brought about equally by differences in the ideas held on political aims and social policy. Arrangements on the ground will for the time being have to be left to the individual States so long as they bear political responsibility.

B—High and still rising expenditure on social security

This does not cause distortions in trade and the supply of services in the Community, because competitivity depends, apart from other cost factors, on the total burden of labour costs and here it is not a matter of importance how the total is made up. We have seen astonishingly rapid approximation of social security expenditure—not the least of the assisting factors has been the economic progress which has been made in the Community. In 1958 expenditure on social security was still accounting for between *12.4* and *18.6 per cent* of national income; in 1970, without any active harmonisation policy on the part of the Community, the figures lay between 20.3 and 23.5 per cent. We can see that the margin as between the Member States has narrowed, the amount of national income taken however has gone up considerably. The entry of new members, we find, will change the picture appreciably. According to the available figures—and unfortunately we have no figures for later than 1966—the margin between the Six of the EEC and Great Britain is a big one. In 1966 expenditure on social security in the EEC took *16 to 17½ per cent of gross* national product (I am not any longer speaking of national income), while in Great Britain the figure was only 12.7 per cent. (The margin may have changed in the meantime, we have figures only for the EEC as at present composed, with the Netherlands leading in 1970 with 19.1 per cent). But when we

compare the EEC figure with that of countries outside we find it well above figure for the most important industrial countries with which it has to cc pete. Against the EEC figure of 16 to 17½ per cent and Great Britain's 1 per cent we have 7.3 per cent in the USA and 6 per cent in Japan. Th are figures that bring up again the doubts I briefly touched upon previou whether we are to give preference to an all-embracing social security syst rather than to a strengthening of personal responsibility with an increase the means remaining in the hands of the individual.

Any arbitrary interference with the gradual alignment of the structures of EEC, such as was demanded as early as 1962 by various participants of European Social Security Conference of that year, involves the danger of alignment of cost components on the principle of the so-called *raisin-theo* which means the best and highest from each of the Member States. This wou push the total burden of labour costs in Community industry up to such extent that we should no longer be in a position to compete on the wo market. There has been, as I have said, an approximation of the costs of soc security in the present Member States but we cannot acquiesce in the w things have gone to date. With the coalescence of the enlarged Communi into an economic and monetary union and the continuance of relations as th are between individual Member States' social policies and the social policy the Community a greater measure of coordination is called for. It is indispen able therefore that those responsible for the creation of national social polic the governments and capital and labour, should put less stress on their autor omous states and adapt their policies to what is needed on Community leve and allow it to be guided by Community aims. Such an attitude will be ir creasingly needed of them as the merging of the separate national economie into the economic and monetary union which saw its beginnings in the Counc of Ministers' basic decisions of February 1971 proceed on its way. Th Treaty gives the Commission the important role of promoting integration i the social policy field, first and foremost by means of organised collaboratio between the Member States. That is the situation today and that is what th Council of Ministers for Social Matters has been guided by since 1966. It is concept which the Commission has largely adopted, as is demonstrated by th memorandum it submitted on 17 March 1971 on social affairs entitled "A Interim Outline for a Community Social Policy programme" and the proposal it contains for Community measures to be taken as a matter of priority.

C—The Fundamentals of a Liberal Order

Social policy in the European Communities however is not only a question o institutions and their powers, it is first and foremost a question of the basi conception of how the economy and social affairs are to shape. The employer hold the view that the European Community must be based on the libera principle. An economy based on liberal principles means free competition an

free and independent entrepreneurs and trades-unions. An essential factor of such an economy is the freedom of movement of workers, capital, services and goods established by the EEC Treaty. We in Germany, and not we alone, have learnt that a market economy was decisive for rapid economic and social progress after a devastating war which threatened all human values. True, the liberal economic and social order, as we see it in varying forms in all the Member States, has its shortcomings. But it shows itself in its achievements to be superior to any other system, guaranteeing a far greater extent of material well-being and a far greater measure of justice with a maximum of personal freedom. It is a fallacy, a dangerous fallacy, to believe that these achievements could be preserved if our liberal economy were to come to an end.

A liberal economy and a liberal democratic social order are inseparably bound up together. Do away with the freedom of the responsible manager and the freedom of action enjoyed by capital and labour and in the long term you will see the end of your own freedom. This applies today and it applies to the Europe of tomorrow. In my view therefore the main task of a European social policy is to watch over the foundations of the liberal order in Europe and promote its onward progress. Part and parcel of a liberal order is ownership of the means of production. It is the basis for all risk-taking in industry. There are those who forget that the productive process cannot be deprived of the right of ownership without harm being done to the whole community.

II—INDIVIDUAL PROBLEMS OF A EUROPEAN SOCIAL POLICY

A—Employment policy

With these basic views stated, it will now be possible to deduce the attitude of employers to the question of "Man in relation to the Firm". I shall not deal with this question in an abstract manner, I shall set it against the background of the present situation in the Community and examine the question whether there is a possibility of joint solutions on Community level and what methods and ways are open to us. We shall have to deal with the question of labour relations in the broadest sense, considering not only man in relation to his job but, much more generally, where he stands in the social order.

On the last point what is of decisive importance for him is his ability to earn a living for himself and his family, whether he does this as an employee under orders or working on his own account. An essential condition of course is that there should be an opening for his labour or simply a job. Consequently one of the priority aims of economic policy is the provision of employment. Here it is not to be expected that a given job will be created or kept in being—industry as it develops increasingly brings changes in the apparatus of production, and a man has to adapt himself to these changes. For this reason it is a normal phenomenon in an expanding economy that in some sectors the

numbers of those employed decline to the advantage of other labour-intensive industries. A forward-looking employment policy facilitating these processes of adaptation is not only good social policy, it forms part of modern industry policy also. It is one of the conditions for steady and healthy economic growth that the apparatus of production as it goes through its successive transformations should be able to call on a sufficient number of workers educated and trained in the right skills. Methods of forward planning and statistical data will have to be more complete and afford better comparison possibilities. This the employers have repeatedly pointed out. Whilst previously employment policy had to concentrate predominantly on the removal *ex post facto* of difficulties affecting the economic situation, nowadays it has to deal much more with problems of structures and how they are to be handled and defeated with, among other steps, measures for increased mobility from trade to trade and from place to place. This being so, occupational training is becoming a key question because of the double task it faces. Correct occupational training must not only give a man the proper skills to match up to the job he now has to do, it must also lay the groundwork for the further training and retraining which more or less certainly will become necessary subsequently. Methods will have to be worked out to take care of adult training. There is hardly any other move so well fitted to give men today a feeling of freedom as security and the conviction of being equipped by their education and training to meet the demands of life and their work.

There is a further connected question which I should like to touch on briefly. In this world of ours, with its increasing industrialisation and its increasing technology, it is going to become ever more difficult to give the man at the work-bench the feeling of being able to keep a view of the whole and see what he is doing as a rational part of the whole process. There will be many jobs where it will not always be possible to avert a sense of boredom and monotony. On the other hand, technical developments in themselves are a factor providing a counterweight here. Automation in very many cases is now transferring precisely the monotonous manufacturing processes and in particular those which are particularly highly labour intensive to machines. Nonetheless we shall still be very much faced with the question of how to minimize as far as possible the conflict between man on the one hand with his inner laws, physical and psychic, and his need for experience of his own and for self-confirmation and certain forms of work and organization on the other. This is also a field where studies by the Commission would be helpful.

B—Cooperation in the workplace and in the firm

1—*In the workplace*

The place therefore which a worker takes in the firm is to a large extent determined by the degree of success achieved in maintaining the best possible

conditions for his activity at his job and in his place of work and seeing to their further improvement. It is undisputed and undisputable that how he stands as a worker is of particular importance for his further integration, for where he works is, so to speak, a second focal point in the worker's life and generally decisive for his position in the social order also.

The task we are all faced with here is a many-sided one. The main thing is the improvement of the situation of each worker as we see it and as he sees it. True, with the division of work to be met with in modern industrial firms there are relationships, conditions of subordination and other obligations that are unavoidable for the worker (and not him alone) because arising from the nature of what is being done; they are toned down as far as possible by limiting them to what is essential to the operations (we should not forget also that the bosses too find themselves at the centre of a field of tension created also that various situations of subordination even if in part they are of another nature). It must be made easier for the worker to see the necessary relationships clearly and accept them. He must in future be given the possibility of developing in his field of duties his sense of responsibility and his initiative. There must also be a guarantee that full account will be taken of his legitimate claim to recognition of and respect for his personality at his work as elsewhere.

Let us not forget that as we grapple with these tasks we are not at the beginning of an operation, we can build on our practical experience and the regulations which make up the law on labour and social matters in all the Member States of the Community. I grant you, the solutions long ago found in the individual countries have not led down the same road, conditioned as they were by so greatly varying past historical and sociological developments and the equally differing conceptions of social policy. Nonetheless in all the six countries we find modern company-management methods, rights and duties of industrial workers' representative bodies laid down in works' constitutions, over and above individual plants and firms the two sides' work on collective agreements, and general principles of labour law and general safety regulations, all meshing together into a system of instruments serving to make possible a further improvement in the position of the worker as a member of the labour-force.

Further developments in the world of industry should be based on the principle of the individual worker being a co-participant in the operations and co-responsible. In that case, what must be guaranteed is the following:

(i) Every worker must be precisely informed on what his duties and responsibilities are. He must be informed about any essential technical, organizational or staffing changes affecting his part of the operation and be able to see clearly what is the connection between what he has to do and the overall operation of the plant.

(ii) Every worker must have a guaranteed possibility of making his views known about measures that affect him and of collaborating actively in the shaping of his job by means of suggestions of his own.

(iii) Every worker must have the right to discuss how he stands in his job and the assessment of his performance with the competent superiors.

(iv) Every worker must have the right to approach his competent superiors with personal requests and complaints and have them heard and decided on.

Social responsibility on the part of employers and trades-unions, as well as the law and obligations at plant-level, have in this respect already made considerable progress. The social responsibility inherent in the business operations of an entrepreneur of today directs him first and foremost to respect the individual dignity of those who work for him. Measures under legislation on safety at work are taking additional account of the legitimate interests of the worker in his workplace. Arrangements under the provisions of works' constitutions facilitate dialogue between employer and employees. The trades-unions also, through collective agreements, are able to influence the way industrial working conditions shape. Again, a style of management which is abreast of technical and economic developments calls for devolution of responsibility to those working at management level. The successes in the matter of integration so reached must be safeguarded and further built on.

This is not to be looked for in an attempt at the most thorough adaptation possible to the regulations followed and the knowledge acquired only in certain Member States which are appropriate only to the specifically local economic and social conditions and accordingly are out of step with facts in the other Member States; it has to be brought about on the basis of principles of workers' integration enjoying common recognition in all the countries of the Community. With all their variations in form and content, settlements made in any Member State under the provisions of works' constitutions lay particular stress on individual plant level. They assign priority of importance to the worker being informed and consulted and put social and personal affairs in the forefront. In so doing, they take account of the fact that conditions on the spot and in the workplace are the most important for workers' integration and most directly affect them. They also take into consideration that one of the most important aims of any works' constitution settlement has to be that of keeping the worker informed and that it is social and personal questions that have priority of interest for him.

No doubt the conceptions that have arisen in this connection in Member State and regulations framed accordingly will undergo changes in some details a further practical experience is gained. But in any case it will be necessary to observe the limits already mentioned which are set by the capacities of private-enterprise economy. I consider it however essential to hold on to th convictions jointly held in the countries of the Community and to make then the guideline for further reflections. Whether we can achieve the ends in vie depends in a decisive manner on whether all concerned are prepared t make cooperative approaches. Any tendencies to confrontation instead c

cooperation for the reaching of these ends not only put efforts towards further integration of the workers in doubt but also endanger what has been achieved already.

It is to be expected that in this way a decisive contribution will be made to the improvement of working and also living conditions in the Community and this much more effectively and dependably than via any self-reliant concepts arising in the institutions of the Community, these being exposed to the danger of being guided by single national patterns with little or no relation to the facts of social policy in the other countries of the Community. This is an objection which can also be made to the proposal for articles of agreement for a European company.

2—In the organs of the firm (and the "European Company")

European employers are emphatically in favour of the introduction of uniform European company law, to facilitate—and further—collaboration among firms over existing frontiers as well as the mergers that are necessary in the interest of economic and social progress in the Common Market and to strengthen the competitive position of firms in the EEC. For these reasons the Commission initiative in the shape of the first draft of July 1970 of articles of agreement for a European company is as welcome as the projected regulation on the creation of a "European joint business interests association".

The employers however do not agree that the rules for workers' participation proposed in the "European company" draft are of the kind likely to solve the question of workers' participation for Europe. They are in agreement with the Commission that the composition of bodies inside a firm must be on the same lines throughout Europe. A standard solution however for the participation of workers' representatives in the proceedings of the board of directors, such as the Commission proposes, loses sight of the variations, at present still great, in labour relations in the various Member States, and this not only from the legal aspect. The differing conceptions of the aims and functions of the two sides of industry over the whole range of labour relations (of which relations at firm-level are of course a part) are of major importance for the question of workers' participation. It is for instance a fact that in Germany alone of all the EEC countries is a seat on the board for workers' representatives recognized as an institution. Also when we look at workers' representation on plant-level with all its variations in Member countries as to nature, composition, functions and powers exercized, we find in the other countries no workers' representation with such far-reaching duties and such extensive rights of workers' participation as works councils in Germany possess. The solution to be found to the question of workers' participation can nonetheless only be a European one, now to cover also the new Member States, first and foremost Great Britain, which has a system of labour relations different from that of any one of the original States of the Community. The Union of European Industrialists

(UNICE) on 12 March 1971 made a detailed statement—I want to remind you of this—on the representation of workers' interests in the "European company".

C — Acquisition of property

The place of the worker in society today is largely dependent on the extent to which he is enabled to acquire property. Facilitation of the acquisition of property by broad sections of the population is one of the big tasks of social policy in our times. It is an essential part of any European incomes policy as defined for instance in the second medium-term economic policy programme. It would be a welcome thing if in all Member States, as required by that programme, an active policy were followed of promoting the acquisition of property. The programme also provides for a Community comparison of what has been achieved so far, to be followed by a study to determine which systems and forms and methods are particularly adapted to the achievement of the economic and social aims of the Community's medium-term economic and social policy. What was there called for has not remained in the stage of theory and some first results of the comparison have been made available. It turns out that the various systems are very divergent in the aims they pursue. In Germany for instance the acquisition of property is promoted primarily for reasons of social policy on the basis of the recognition that property is a guarantee for the individual of greater spiritual and material freedom. There is at the same time a predominating conviction that an economy on a basis of private property can only be credible in the long run and free of social tensions if there is the broadest possible spread of what the nation owns. In France the accent, apart from general measures for the encouragement of saving and the acquiring of housing as owner-occupiers, is on the improvement of employer-worker relations, to be achieved first and foremost by means of obligatory profit-sharing. Against this, in Italy the main attention is obviously being paid to the provision of housing.

There is a close connection between motives of social policy and the reasons behind the economic policy decisions for the fostering of increased acquisition of property. In the Federal Republic, for instance, when the Law on Savings Bonuses was passed, it was also the purposes of the capital market that were being pursued, with a view to increased private savings on long-term deposit facilitating the financing of public and private-sector investment. In the case of the Law on House-building Bonuses of course the main aim was the encouragement of housing construction. In France profit-sharing is tied up with investment aid for firms with a view to the simultaneous stimulation of economic expansion. In the Netherlands what is being aimed at also is an anti-inflation effect, to be achieved by longterm locking-up of purchasing-power.

The choice of this or that system in each Member country, and its details, depend of course on the weight given to this or that aim in view. Usually at

any given time a whole collection of measures is in force, some of them to the benefit of the population as a whole, others only for lower-income groups or the working-class, particularly workers on low wages. In most cases various forms of encouragement such as taxation allowances, bonuses, loans at reduced rates of interest and interest allowances are in operation at the same time.

The encouragement of property acquisition in the Federal Republic by broad sections of the population, particularly by the workers, takes three forms.

Firstly, tax allowances and the grant of bonuses on deposit savings as provided for under the Law on Savings Bonuses, then what is provided for under the Law on House-building Bonuses, and favourable tax-treatment of life-insurance savings and steps to acquire own homes. These are advantages which anyone can put in a claim for. The second important area is arrangements, in the scope of collective agreements, for allowances of property-acquisition effect for workers in certain sectors. Thirdly, measures taken by individual firms for the benefit of their own employees play an important part. Bonuses paid on savings-accounts have up to now resulted in deposits at present amounting to about 20 thousand million Deutsche-Marks, which means 10 per cent of all savings-deposits by resident private persons. Savings deposits under bonus or tax-reduction schemes for home-building at present amount to around 40 thousand million Deutsche-Marks, nearly three-quarters of the total being deposited by wage-and salary-earners. This is a figure to be looked at against the background of the total amount spent on housing-construction in 1971, which was 45 thousand million Deutsche-Marks. It is not without interest in this connection that almost 40 per cent of households in Western Germany own their own houses or flats, which can be regarded as visible evidence of the success of housing policy in the Federal Republic.

There have been interesting developments in the encouragement of property-acquisition in the Federal Republic by workers as employees. The number of workers receiving allowances of property-acquisition effect from their employers, amounting to 300 Deutsche-Marks a year on average, rose in 1971 from nine to twelve million. To these are to be added 1 600 000 State employees, making a total in 1971 of 13 600 000 receiving allowances of property-acquisition effect from their employers. With the working population of the Federal Republic at 22 400 000, this means that well over half of those employed are benefiting by this new system of allowances. It also meant that the private sector last year shouldered a burden of about four thousand million Deutsche-Marks. The actual amount of increase in workers' holdings so brought about, however, was considerably greater. If we consider that the workers have not limited themselves to merely accepting the employers' allowances under the new system but that many of them have also made savings of property-acquisition effect out of current wages-income, taking advantage of reductions and bonuses allowed by law, we reach—and this is based on figures from the banking world—a total figure for savings of about 7 650 million

Deutsche-Marks. If to this we add State bonuses on savings and on deposits for house-buildings purposes, which together are to be estimated at about 30 per cent, the accretion of workers' holdings in 1971 resulting from the application of the legislation on property acquisition comes to just ten thousand million Deutsche-Marks. The great importance of what we have just established lies above all in the fact that it has been possible, thanks to the existing freedom of action in the matter of conclusion of collective agreements and the Third Law on Property Acquisition, to stimulate also population groups who had not before been in the habit of putting anything by to start out on a new road of personal responsibility.

The new development we have been witnessing is due to the readiness of the employers, which they made clear in 1968, to come to an agreement with the trades-unions on allowances of property-acquisition effect. The unions accepted the offer made. The new road taken together by the employers and the unions has led since then to successes which can be held to be impressive. The task of German employers, as they now see it, is to broaden the road and build on the successes achieved.

No doubt, with the different possibilities offered for the acquisition of property in the Community, the picture is a confusing one and the results are difficult to compare. I think however serious attempts should be made in the other countries of the Community to profit by the positive experiences we have had in the Federal Republic with the encouragement of property acquisition by the workers. German employers stand ready for an exchange of impressions and to work together particularly on this with their colleagues.

For conclusions to be drawn from the comparison of Member States' systems for the promotion of the acquisition of property, I refer you to the views expressed by the Employers Association Committee at the Commission hearing of 24 November 1971. They concentrated on the following points: measures for the promotion of property acquisition by the workers should be agreed on in the framework of collective agreements, the collective agreement method being preferable as a matter of principle to any State-imposed coercive measures. The use of collective agreements provides the greatest possibility of adjustment to the needs and mentalities of workers and firms in the several countries of the Community. Attention is also to be paid to keeping the financial load employers have to shoulder by virtue of these allowances inside the limits of economic capacity, so that harmful consequences are avoided for money-values stability, full employment, economic expansion and the balance of overseas payments.

D—Capital and Labour in Dialogue

Another question coming under the main theme of "Man in relation to the Firm" is that of how capital and labour are to work together on Community

level. As progress is made towards the achievement of the economic and monetary union the need will arise of more exchanges of opinion on social policy, and with the advance towards economic integration and its extension to cover currency policy and with the political consequences that will well up, there will have to be intensified cooperation between the two sides of industry and the institutions of the Community. The dialogue between capital and labour on Community level will have to be adapted to the new situation arising as will also the possibilities of their working together on the decisions that affect them. Here of course we are not starting from Square One. Ever since the EEC was established European capital and labour have been holding talks, for instance in the bodies set up for the purpose, such as the Economic and Social Committee, the advisory committees of the Commission and the Joint Committees. They have also had and continue to have direct contacts without the presence of third parties, at national-association level and at industry level.

The question now arises how their relations and discussions can be enlarged upon. We must concur in the views expressed by the Commission in its memorandum on social affairs (Document 600) to the effect that at the present time the main endeavour under a European incomes policy still to be worked out must be to develop the dialogue between capital and labour. At present it is an open question what form it is to take and thought will have to be given to the part to be played in future by the Economic and Social Committee as the meeting-place of all interested groups in the economic and social life of the Community. In no case should any form be chosen for this dialogue which infringed on the freedom of negotiation of capital and labour as recognized in every country of the Community. The Joint Committees proposed by the Commission, with their membership being appointed by the Commission even on the proposal of the organizations coming in question, do not meet the principle of freedom that we must insist on. In this context we frequently hear a wish expressed by the unions for European collective agreements. It would take us too far from the subject of the present text to go in detail into the very weighty legal questions which this raises. In the absense of any uniform basis of law, as our enquiries have shown, "European collective agreements" could only be conceived of as non-binding models or as agreements of like content for application in single countries. Defining with any degree of clarity what the content, the material substance should be, raises difficulties which are of equal if not greater difficulty.

It is a well-known fact that inside each national economy are to be found regional differences, which can be very considerable, in wage-levels and other working conditions. They come from differing locality considerations, differing productivity levels and performances, differing cost of living levels and in part from differing degrees of emphasis placed on certain remuneration factors. The bigger the area covered by the economy the more these differences will be in evidence. It seems neither realistic nor desirable to wish to remove the variations in wage-levels and other working conditions which these differences give

rise to. There are other important variations which arise from the varying wages-structures in the various countries. In France wages in the main are aligned to the necessaries of life for the individual employee and the State system of family allowances takes account of this national wages-structure. Wages policy in the Netherlands takes into account that children's allowances are lower than in France and bears family circumstances in mind, though to a less extent than previously. If such structural variations cannot be removed any attempt at European conformity must lead to distortions arising.

In the same way, a European regulation of general working conditions, at least at the stage integration has now reached and, I think we must presume, for a long time yet, must in the main be regarded as unrealizable. To begin with, there are wide areas of these general working conditions, and we may take working time and holidays first, which are governed by the Member States' law-books and their variations; and legal provisions make it impossible, at least from the practical point of view, for the two sides of industry to make any arrangements in respect of some of them in collective agreements. The individual areas here, such as the length of the working week and annual and paid legal holidays, offset one another and are internally correlated. For this reason those concerned are gradually realizing more and more that the main decisive thing for an assessment of the question of working time in the different countries will be a comparison of the actual time worked in the course of a year. This amount of time however cannot possibly be the subject of any settlement under collective agreements. The crucial factor is that wages, general working conditions and social-security benefits, seen from the point of view of the economy, are all indissolubly bound up one with another. They are all outgoings from the same fount, out of the stock of goods and services produced by the economy as a whole. This is an undisputed and undisputable fact and one that must be borne in mind by all concerned in collective agreement negotiations.

Reflection on these matters leads us then to the conclusion that it will not be possible in any foreseeable period of time to arrive at binding agreements of this kind between the two sides of industry on European level. One of the necessary conditions would be the harmonization of collective labour law, but labour law forms part of a body of law which takes on highly varied shape from one Member State to another and is in part grounded and codified in constitutions and based on differing historical developments and differing mentalities. The idea of concluding European collective agreements should therefore be dropped so that the dialogue between capital and labour is not put in peril from the outset.

A proper subject for talks between the two sides of industry is offered by the problems of the present day that have reached a stage of importance in all Member States or will do so and are seen to require to be dealt with on Community level. Here again employment policy comes at the top of the list; for dealing with it the Council of Ministers has established a ferum, which

employers and trades-unions had been calling for for years, with the appointment of the Standing Committee for Employment Questions. It affords the opportunity of bringing the opinions of capital and labour to the notice of the Council of Ministers before it takes decisions. Another subject for talks could be the possibility of a European incomes policy. The stage-by-stage achievement of an economic and monetary union in the European Communities makes it appear desirable for the two sides to talk over their ideas on what an incomes policy should do and aim at and on the problems that will be faced in bringing it into being. Many trade-union leaders, we know, clearly see an incomes policy as a means to the redistribution of wealth; the employers look on it first and foremost as an instrument for the checking of inflation, a method ensuring overall effect. As progress is made with the economic and monetary union it will be increasingly necessary for employers and unions to frame their wages and conditions policies more than before in accordance with Community aims and abandon purely national policies. This presupposes that each side will not only collaborate more intensively with associations and unions in the other countries of the Six but also be ready to conduct joint talks on Community level. A first beginning was made in 1971 when the Commission, in compliance with the resolutions of the Council of Ministers, staged a discussion of the report on the economic situation with representatives of capital and labour, even if it was in separate sittings.

Final observations

The questions I have been touching on have a bearing, some of them a more direct one, some of them a very indirect one, but all of them a bearing that cannot be neglected, on the place and part of man in relation to the firm, both as a worker on the job and as a member of society. We must address ourselves to the sober analysis and discussion of the many-sided problems, the satisfactory solution of which is what peace in industry depends on, as well as the personal well-being of each one of us. We know from experience, and it has been a very bitter experience at times, how intimate is the connection between peace on the labour front and peace in the political sphere. For this reason the search for the right solution lays a heavy responsibility on the two sides of industry and on the institutions of the Community and moreover they must have the aim of the general good constantly before their eyes. An agreement on questions in dispute, going beyond what the economy is capable of or undermining our market economy, would be a bad solution and no lasting one.

MAN IN THE ENTERPRISE(*)

J. HOUTHUYS

We are obliged, now as always, to develop our views of things in a succession of analyses and syntheses, of facet-by-facet approach and panoramic survey, of part and whole. On the one hand, the subject that has been allotted to us, i.e., "Man in the Enterprise", fits into the larger context of the subject of the Conference: "Industry and Society in the Community". Furthermore, we have been asked to deal with the subject as trade unionists, so that we have confined ourselves to treating it from the standpoint of the trade union movement. Even seen in this way, the reader should know that at the level of the European trade union movement there exists both unity and diversity of views concerning the subject in question. A Conference such as the present one has the great advantage, seen against this background, of submitting for discussion, in their general features as well as in their component parts, the subject "Industry and Society" and the sub-division "Man in the Enterprise", to a large number of persons concerned drawn from a wide variety of professional circles within Europe. May this confrontation engender light which can serve to illuminate our action for the development of a European society in the service of European man.

It is not a difficult matter to situate the subject "Man in the Enterprise" in the broad theme "Industry and Society in the (European) Community". We could say that the former is a transposition of the latter within the microcosm of the enterprise. In the final analysis, it is here a question of the same thing twice over: the confrontation of technique, organisation and economy with Man, in the first case in the wider context of Society, and in the second in the narrower framework of the Enterprise. Furthermore, the mutual relations between both "worlds" are so intense that we could almost say that industry is the sum of the enterprises and that the community of people in the enterprise—the workers—is then the most important component of society.

The term "Man in the Enterprise" obviously refers to the workers in the enterprise. When we speak of workers, we have in mind all workers, each separately and all collectively. Consequently, the term also includes the supervisory staff, the engineers and the whole group of senior executives, the laboratory and research staff, the headquarters personnel... We shall indeed have something to say in due course about the place occupied by the management itself. Lastly, it should be pointed out that we are concerned here, quite obviously, with "the enterprise"! For the workers, this is of course the great, everyday reality... but "legally" and "institutionally" it hardly exists in our various national legislations. At this level, only the joint stock company exists! However, no-one would dream of formulating the subject in the following terms: "Man—or workers—in the joint stock company". And a good thing, too! However, is it not typical, at the same time?

(*) Translated from the Dutch

The subject "Man in the Enterprise" also divides up into three sub-sections. In consultation with the rapporteurs concerned and the EEC departments, we should confine ourselves to three sub-divisions of the subject. The choice may seem arbitrary to some, but a selection had to be made. We have selected these subjects not only because they are important, but also because they are located before us rather than behind us. They still need to be thought over and they still have to be implemented. They provide matter for consultation, exchange of views and confrontation. Experiments are desirable for each of the subjects.

The three subjects are:
(i) Profit-sharing and Investment Wage schemes as a means of arriving at new relationships between worker and enterprise and, seen more widely, between society and industry within the European Community.
(ii) Collective agreements at the European level.
(iii) Participation in the Enterprise.

All three of these subjects are of importance for the workers, for all three change existing structures. They are therefore also socially important and fit excellently into the wider perspective of the Conference, i.e., "Industry and Society" according to our European way of life. It is however obvious:
(a) that profit-sharing and investment wage schemes, depending on the formulas and systems chosen, can deeply affect both income distribution and income appropriation;
(b) that the implementation of collective agreements at the level of the European sector or of the European company (multinational enterprise) may be very important for social and political Europe;
(c) that participation of the workers in their enterprise, at the level of the workshop, the department, the enterprise and the company, may considerably change the capitalistic and anonymous system itself within the European framework.

Thus, Man in the Enterprise is to a large extent determinant for Industry in Society!

Provit-sharing and Investment Wage schemes as a means of arriving at new relationships between worker and enterprise and, seen more widely, between society and Industry within the European Community.

It must be pointed out first of all that I, as a trade unionist, can regard profit-sharing and investment wage schemes as interesting only insofar as they are a means of arriving at new relationships between worker and enterprise and, seen more widely, between society and industry within the European Community. These new relationships must be firmly anchored in new structures, contributing towards a more human world for workers in the first place and for the whole of society in general.

All forms of direct profit distribution to the workers of the firm as well as al forms of workers' shareholding or of people's capitalism therefore do not sui us, either from the workers' point of view or from a European point of view I am well aware that these forms exist here and there, that they are mor widespread and appreciated in the United States, but for our European worker these forms merely result in promoting the existing capitalistic system.

This also amounts to saying implicitly that for our workers neither profi sharing nor the investment wage is a legal title or a legal means, on which th workers' right to co-determination must be based. The right of the workers ar their trade unions to have a say in the enterprise or in the national economy not to be based on property titles... for we should then not only legalise contested system, but even forge a company law system after the event, whi in fact is already overtaken. The workers' labour is a more than adequate ba for their right to have a say in matters!

General definitions

Very generally, we understand by profit-sharing a system whereby a share ownership of the growth in assets in the enterprise or company resulting fr surplus profits or self-financing is granted to the workers, in the form ordinary or special shares. Self-financing implies that a part of the profit—t surplus profit—is not distributed but is appropriated to reserves and used the enterprise itself. Surplus profit precedes self-financing and could be defin as what remains after a reasonable remuneration has been paid to the capit in the form of dividends. In this way, the notion of "profit" is implicit changed: on the one hand, it is acknowledged that the capital is entitled to reasonable remuneration—dividend—which may be regarded roughly as "cost", after the wage; on the other, there remains thereafter a possible "surp profit", to which certainly labour and capital, but possibly also the consum and the government, are entitled. This growth of assets is distributed a depending on the formula, may or may not remain in the enterprise.

Either the "surplus profit" is paid out without restriction to the parties entitl which for the workers amounts to saying that it will largely go to consumpti This is an ordinary profit distribution.

Or the "surplus profit" is added to the firm's own resources in the name the workers concerned in the form of ordinary or special shares and the s serve for the self-financing of the enterprise. They are then blocked fo certain time and are then a form of compulsory saving and investment, w each year gives a normal "yield" for the workers concerned.

Or else the workers' share is compulsorily reinvested outside the firm itse mutual funds: per branch of industry, per area or at the national level. In case, too, these blocked funds must each year give a normal "yield" for workers concerned.

The way in which these directly shared-out surplus profits or these normal yields of the invested surplus profits are divided among the workers may be very divergent: they may increase, maintain or decrease the existing inequalities of remuneration among the workers.

Various options are consequently to be exercised here... depending on our wish to create or not to create new relationships and new structures.

The same applies to the investment wage.

By investment wage we understand that component of the wage or of a wage increase that receives a special destination by collective agreement or by law: i.e., for asset formation or investment and not for consumption. The investment may occur in the enterprise itself or in a community of enterprises via an investment company or a mutual fund. The extent of this investment wage is generally conceived as relatively small, as an extra or as something marginal. e.g., 1% would already be substantial. It should be pointed out that the investment wage is determined proportionally to and in function of the wage, and not of the profit. Here, too, the formula implies that these funds as a general rule and for a certain period—e.g., 5 or 10 years—are blocked and thus withdrawn from consumption. This investment wage will, in respect of the workers, normally take the form of bonds or claims on which an annual interest payment is due.

For profit-sharing as well as for investment wage, it must then be ascertained how the workers will receive guarantees and how they will be able to exercise the power to have their say, respectively in the case of ordinary or special shares from profit-sharing in their own enterprise or in a mutual fund, or else in the case of bonds from investment wage in their own enterprise or in a mutual fund. Here too recognition and guarantees must be present and that cannot happen without the recognition of the representative, acknowledged trade unions.

What is aimed at with profit-sharing and investment wage schemes?

Originally, the idea of profit-sharing was mainly developed from considerations of justice at the level of the separate enterprises. Indeed, people had come to realise that justice vis-à-vis the workers was not served once wages had been paid—even if they were relatively high—if at the same time it was seen that the shareholders not only received a reasonable dividend but also laid exclusive claim to the growth of the capital via all kinds of appropriations to reserves and depreciation techniques in an ever increasing practice of self-financing. In the interests of justice in distribution, the workers should also have their share in the increased assets. *This moral recommendation is made,* inter alia, in the social encyclical "Mater et Magistra" (1961), in which it is argued that the workers contribute labour to the formation of these increased assets.

Thus far this micro-approach of a social and ethical nature.

However, a macro-approach is just as valid, from the economic and soci well as the ethical standpoint. It is based on a new social vision.

Prof. H. Deleeck summarises this point as follows in an article:

"Profit-sharing and investment wage schemes are techniques whereby, i institutional way, it is desired to change the existing structures of the distr tion of income but above all of assets, in the direction of greater spreading diminution of the distance between a large group of owners of capital. It is aim, at least to some extent, to distribute the proceeds of the productio another way, and to involve wider groups of the population, more particul the workers, in the investment function. In this connection, it is the endea to bring about new institutional relations concerning the application distribution of profits, the method of financing industrial expansion and relationships between capital and labour, which are more in line with social conceptions of the second half of the twentieth century.

"We cannot go further here into the fact that the incomes and assets are s to a large extent unequally distributed in our Western society. Reference m indeed be made to the remarkable phenomenon of the constancy of the sh of wages in the national income: seen over a fairly long period (and taki account, naturally, of the growth in the number of wage and salary earners the active population), this share (direct and indirect wages together) alw remains equally great throughout cyclical fluctuations.

"This phenomenon may, in simplified form, be explained as follows. If wages level (the labour cost) is pushed up higher than the labour productivi then we arrive at an inflationary process whereby the price rises will can out the advantage of the wage rises. For its part, the share of the capi proceeds cannot be reduced without thereby impairing the foundation economic growth. The shares of labour and capital in the national income m indeed increase in absolute volume, but the relative shares will remain t same. If now it is desired to increase the share of wage and salary earners the national income, then this is only possible by causing them to share in t capital yields and thus in the capital ownership.

"Profit-sharing and investment wage schemes are thus techniques whereby it desired to break out of a twofold circuit: increase of the share of the wage a salary earners in the national income (wider distribution of assets and incom without inflation and without reducing the total volume of capital good Positively speaking, in view of the increasing need for investments, in parti ular risk-bearing investments, a social and economic structure will be set whereby the entire population is involved in the investment function. Just they are now (through the social security structures) involved in the soci

security of existence, the working population could thus also be structurally involved in the economic security of existence".[1]

And I should like to add something further: not only in the economic security *of existence but also in the economic expansion*, which is rendered possible by these extra savings and hence extra investments. Furthermore, this economic expansion will have to be implemented according to the targets and the directives of a democratically developed economic planning.

As stated, the profit-sharing and investment wage schemes are placed in a wide general and structural social framework.

The trade unions in the European Community ask themselves many questions and lay down even more conditions.

It is quite common knowledge that the trade unions in Europe *do not* agree on this question and that there are ardent advocates as well as opponents of the idea. The fact that, for instance, some see it as an important means for structural reform, and others find that it is an integration into the capitalistic system, is *at first sight indeed paradoxical!*

Much, however, is explained by the following considerations:

(a) even though the same words: profit-sharing and investment wage, are used, they do not refer to the same thing. The form, conditions, context and system under which profit-sharing and investment wage schemes can be developed are so divergent that it may in fact be a question of very different things, concerning which one will in some cases be "for" and in others "against";
(b) in each of the countries concerned, the basic conditions for profit-sharing and investment wage schemes are not always present. We refer here to prior conditions which have to be implemented. We merely have to think of the basic wages and the basic social security... or of the *reliability of* the basic accounting data in the case of profit-sharing.

However this may be, the trade unions in the European Community ask themselves many questions and lay down even more conditions.[2]

Thus, we know that the three Netherlands trade union federations and the German DGB are definite advocates of the profit-sharing and investment wage schemes. But this does not prevent them from being critical and from laying down conditions. The DGB thus rejects all measures:

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[1] Deleeck, H., *Vermogensaanwasverdeling en Investeringsloon* in *Synopsis* (BDOP), March–April 1969, pp 72–73.
[2] See *Standpunten van de verschillende milieus V-252-71-N* memorandum by the EEC departments

(i) which jeopardise social security and co-determination;
(ii) which adversely affect a reasonable growth of the workers' standard [of] living or hinder their mobility;
(iii) which form a serious danger to full employment, economic expansion [and] price stability.

The attitude of the French trade unions is very much determined by the [...] [...]cial system that was introduced in France, mainly by the decree of 17 Aug[ust] 1967.

According to the CGT, any system of encouragement of capital formation [by] the workers must be subjected to certain conditions such as increase of [...] wage income with guarantee of the sliding scale of wages, expansion of [...] supplementary pension systems, based on profit-sharing, improvement of [...] whole system of social security.

Furthermore, the stimulation measured would also need to aim at social targ[ets] and mainly at saving for homebuilding.

The *Confédération française démocratique du Travail* (CFDT) thinks, in pr[in]ciple, that the community must be owner of the growth in assets created [by] self-financing, i.e., an enterprise, the consumer, the worker and the state coo[p]erating in the formation of these assets.

Moreover, in the French system of 1967, the investor remains free in h[is] investment decision, while the worker is obliged to make savings from h[is] wages, without the workers and their representatives being able to exert a[ny] influence thereon.

Force Ouvrière is opposed to any measure whereby the workers are oblig[ed] to save. Such a system for the promotion of property-formation cannot [be] accepted as long as the resources of the majority of the workers rema[in] inadequate.

Force Ouvrière is also opposed to stimuli aimed at making the workers shar[e]holders of the companies in which they work. The workers then run a twofo[ld] risk: in case of bankruptcy of the firm, they may lose both their job and th[eir] savings. Furthermore, the ownership of shares in the company where o[ne] works forms an obstacle to the geographical mobility and the occupation[al] mobility, which are promoted by the government.

In Belgium, the ABVV which "is against any form of incomes policy, is a[lso] opposed to arrangements for property formation which force the workers [to] save. It considers, on the other hand, that a study needs to be made of t[he] factors which determine the savings sense and the consumption impetus: rath[er] than stimulating the workers to save, the consumption of useless produ[cts] needs to be checked, especially if the latter is a consequence of advertising [via] modern mass communication media".

In Italy, for instance, "the CGIL, which rejects any form of incomes policy, is in principle against a policy aimed at property formation which forms part thereof. This workers' organisation is also opposed to all systems that lead to workers' participation in arrangements aimed at capital accumulation, arrangements which are dominated by major concentrations. It is of the opinion that the most important problem is not the formation of property with the workers, but that it would be necessary to go more deeply into the distribution of the increase in the national wealth (with a view to ascertaining the extent to which the workers derive benefit therefrom) and in the development of consumption, more particularly into the distribution between private consumption and public consumption. The tax reform, which is now being called for by the Italian trade union federations, will have to make possible a policy of government expenditure to promote social investments, whereby the lack of equilibrium in the Italian economy will be overcome".

This concise summary illustrates the fact that apparently paradoxical positions of the various trade unions within the EEC may largely be explained

(a) *either by the formulas concretely proposed, which may be better, good,* or bad;
(b) or by the absence of the prior basic conditions.

My own organisation—the Belgium ACV—has only incidentally expressed an opinion on this whole group of problems at the time of its orientation congress in 1968. In the report "Responsibility for the Future"—("The social programme of the ACV"—Part III—Chapter II), under the heading "The wage remains the core of the workers' income—other forms of workers' income are becoming more important", we read the following: "These ideas have been disseminated in recent years for diverse and partly fundamental reasons, and have been implemented here and there in one form or another.

"We too shall be confronted with this in the near future and we are prepared to fall in positively with this idea.

"However, we formulate a fourfold reserve:

(i) these formulae cannot be imposed on the workers against their will;
(ii) in any case, they remain supplementary vis-à-vis the ordinary pay and acquisition of income;
(iii) they are not regarded by us as a "legal title" in order to be able to have a say in the joint stock company: the workers wish to have a say in the enterprise directly on the basis of their work;
(iv) the introduction of this system must contain sufficient solidarity elements so as not to increase further the existing pay differences between strong and weak enterprises".

An attempt at concretisation in the case of Belgium

A rather modest application of profit-sharing and investment wage sch a country such as Belgium would nevertheless have a considerable st significance in the long term. In this connection, it should be borne that Belgium has a high wages level, relatively and absolutely, that dustrial profitability is certainly not on the high side and one form of p spreading among the workers is highly developed by comparison wit countries: 50% of the workers' homes are their own property.

According to the calculations made by Prof Deleeck on the basis c figures, "with an annual distribution of claims on assets to the amc 5 000 F (which more or less corresponds to two weeks' wages for the Belgian industrial worker), an amount that belongs to the field of r possibilities in case of allotment of half of the growth in assets to the a worker after 40 years' service, and subject to capitalisation of an i rate of 6%, would have assembled assets of nearly 775 000 F. In th hypothesis, after 20 years the capitalised assets would amount to a 184 000 F. If only the claims on assets themselves remained saved, a interest would have been used, then these assets after 40 years would amc 200 000 F and after 20 years to 100 000 F. This amount is valid in th of unchanged value of the annual growth in assets; it would be reali take account of an annual growth percentage of, e.g., 3%, which over a p of 40 years would yield almost double this amount. The extent of the dividual amounts (both of the assets and of the capitalised interest) is i impressive'.[3]

Although the yield of these capital amounts remains small by comparison the wage income, reasoning on the one hand on the basis of the figure mentioned and on the other, of the basic statement that—regarded in the term—the relative share of the income from labour remains constant i national income, then it remains equally true that according as, wit passage of the years, the workers' share in the overall saved assets c nation increases under the influence of profit-sharing or investment schemes, the relative share of the workers' income in the national incom also increase considerably.

For what purpose could profit-sharing and investment wage schemes structurally?

Other introductory reports on the same subject will also reply to this que In this respect, much depends on the formulae and methods selected.

[3] Deleeck, H., *Vermogensaanwasdeling en Investeringsloon – Een terreinverkenning*, een SESO-studie dracht van de Christelijke Centrale van de Houtbewerkers and Bouwvakarbeiders – 1967 – pp. 1

I shall therefore deal with this question rather summarily.[4]

Profit-sharing and investment wage schemes could be used structurally:

first and foremost in respect of production,
then in respect of income distribution,
and lastly in respect of income *appropriation*.

This influence will make itself felt on the margin of social and economic life. Major shifts in social and economic life are not to be expected in the short term: abrupt changes are indeed neither possible nor desirable The charm of living is like the charm of a woman: a little something extra makes all the difference!

In respect of production, profit-sharing and investment wage schemes could exert action on

1. the strength of economic expansion because the investment volume is sustained via the savings volume and—in the case of investment wage schemes—is directly increased;
2. the orientation of economic expansion because, in national investment fund formulae, certain qualitative targets can be aimed at
   (a) either the strong points of the economy
   (b) or the sectorial goals of an indicative and democratic economic planning
   (c) or certain collective arrangements
   (d) or regional economic development
   (e) or social infrastructure works.
3. Certain aspects of inflationary tensions in the wages-prices spiral could be attenuated via the investment wage;
4. the cyclical policy in general, as regards both anti-inflation and anti-deflation measures. National investment funds can be used for cyclical control purposes;
5. the democratisation of the economy. All the previous elements together can be developed into a concrete instrument of democratic national economic planning in countries of the workers' collectivity and of the national community.

In respect of income distribution, profit-sharing and investment wage schemes could be used structurally:

1. in order to revise partially the overall distribution of the National Income between income-from-labour and income-from-capital in favour of the workers by providing the workers with an income-from-capital as well as

[4] See *Basiscriteria voor de vaststelling van de lonen en de daarmee samenhangende vraagstukken van een loon- en inkomenspolitiek*, report drafted by Prof. G. Bombach (Basle), Prof. L. Baeck (Louvain), Dr. Merli Brandini (CISL, Rome), Prof. Sellier (Aix-Marseilles) and Prof. D B.J. Schouten (Tilburg) on instructions from the EEC Commission, 'Studies' in the 'social policy series', No. 19–1967.

their income-from labour; this redistribution effect is exerted at t
basis of the income distribution and not subsequently, such as occ
example, via taxation;
2. within the workers' group itself, to make of the profit-sharing and
vestment wage a redistribution income among all workers, thanks to
another technique. In this way, the differences in direct wages am
workers are attenuated by these equalising investment yields;
3. via the investment supplement and the nature of these investme
exert indirectly an income distribution effect. Indeed, these inve
may lead to new and better employment, i.e., labour income. The
also, via the collective arrangements and the social infrastructure
they bring about, have very real income redistributing effects f
workers;
4. via their contribution to price stabilisation, either to protect the real
or to leave more scope for real wage increases.

Lastly, *in respect of income appropriation*, the profit-sharing and inve
wage schemes would in a first stage as well as permanently contribute
development of the savings function with the workers. Naturally, this
comes after the voluntary savings by the workers, after the workers' savi
homebuilding, after voluntary savings as a supplement to the compulsory
security by the workers. However, this form of compulsory but temp
saving, by collective agreement or by law, also promotes the savings fu
with the workers. In the negative sense, one may oppose to this the compu
saving with the workers—with the active population—via taxation impos
the government, either directly or indirectly via the taxation of goods
services. Positively speaking, this form of compulsory but temporary s
by collective agreement or by law may, by the manner in which it is ta
and worked out, make the workers more aware of the fact that the
actively involved in the economic events of their country and of their e
prises and that they perform an active and autonomous role of their
therein.

Seen in this way, I think that, by and large, we can and must approac
problems of profit-sharing and investment wage schemes in a positive
from the point of view of the labour movement, on condition that we
guard—in an unprejudiced way—the prior conditions therefore, that we a
the form which is structurally most favourable for the workers . . . and th
continue to bear in mind its relative nature. Only then is it an eleme
fundamental progress and development of the workers as a whole.

To contribute to this end is the role and the proud task of the trade u
movement.

COLLECTIVE AGREEMENTS AT THE EUROPEAN LEVEL

The development in the direction of the progress of social law and in particular of working conditions in the six Common Market countries in recent decades has been determined to no small extent by the collective agreements.

In the other sub-sections of social law which traditionally belong to the competence of the legislator, *inter alia* in the field of social security, consultation between the social partners has to a considerable degree played a trend-setting role.

Naturally, all this has not proceeded without difficulties. Sometimes, the conflicting interests were only reconciled after long and bitter conflict and even more laborious consultation.

In general, however, it may be observed that the social partners have come to show a greater openness towards each other and a readiness to talk things over. This open approach and this readiness are found most markedly in those countries where both parties are aware of the positions of strength acquired and of their common responsibility for the social and economic progress of the country and of the entire population

Cannot the experience gained at the national level be made use of with a view to enabling the economic and social integration and development of the European Economic Community to proceed in a peaceable and harmonious way, in the light of a constant improvement of the living and working conditions of the entire population concerned?

We wish to seek a reply to this question, whereby we have in mind above all the worker, and man in the enterprise. In particular, we wish to place the attempt to achieve collective agreements at the European level directly at the service of the worker, of man in the enterprise. The connection between the two is obvious.

The fact that the problem is not so simple may be seen from the historic observation that the very idea of European collective agreements was disseminated with some enthusiasm by the trade unions as well as by the European Commission at a quite early stage already, i.e., in the early 1960s.

How is it that so little came of it? Certain reasons are quite evident.

It is no secret that the European employers have, in an overall and persistent way, opposed the conclusion of European *joint collective agreements*, whatever their content might be. Nor is it a secret that the Council of Ministers was just as assiduous in checking any initiative in this direction and certainly did not promote a positive framework in which European collective agreements could be concluded.

movement, both at the European and the national level, is prepared to use every means, including strikes."

"The question of European collective agreements is primarily not a juridical problem, but a question of power relationships and in connection with specific conflicts of interest with respect to working conditions between *one or more* employers, whether or not grouped in organisations, and on the other hand, one or more groups of workers organised in unanimous, strong organisations.

The social history of the six countries shows us that, long before the collective agreements were included in the legislation as a legal institution, arrangements were reached for the purpose of settling those conflicting interests, arrangements which have all the characteristics of a collective agreement as now recognised in law, the only difference being that the application thereof was exclusively decided either by the strength of the trade union movement or by the goodwill of the employers and their respect for their word. In Belgium this *de facto* situation even lasted until 1970."

Over the past two years, however, some rays of light have been observable, which may give us grounds for hoping that the trade unions want to tackle the matter seriously.

Very generally, they base themselves for this on the new approach to social policy in the EEC which seems to be emerging since the Conference of EEC heads of government at The Hague. A concrete indication of this is the fact that the EEC Commission wants to promote the establishment of more European joint committees per industrial sector.

The trade unions, however, base themselves on other elements. There is obviously a stronger and renewed awareness and attempt by the various national trade unions—however they may be organised at the European level—to set themselves up at the European level as a single group and to act as a single front. This is undoubtedly the consequence of the growing Europe, but in particular of the growing European capitalism: multinational enterprises, European concentrations and understandings among enterprises and European employers' organisations.

We observe the first reactions in this direction:

(a) in the renewed will of our European trade union organisations to arrive at European collective agreements via European joint committees (Trade Union Internationals of the European Organisation of the WCL on 25 and 26 October 1971 at Strasbourg) and in accordance therewith "to develop a formal professional European structure to which a part of the national autonomy of the trade union organisations would have to be transferred";
(b) in the joint standpoint of the European Organisation of the WCL and the ECFTU, laboriously arrived at, with respect to the draft directive on the

European Company, in which is also included a chapter on the collective agreement per European Company;

(c) in the first trade union contacts, consultation, exchange of ideas, intervention and campaigns at the level of the European multinational enterprises. The latter is important.

A—The Collective Agreement in the European Enterprise

It is obvious that the demand for collective agreement is located in the first place at the level of the existing *de facto* European enterprises and—in the near future, it is to be hoped—at the level of the *de jure* European enterprises: the European companies.

1. The European enterprise exists, even although it does not exist in law or it already exists on the basis of complex combinations of national legislations (NV Agfa-Gevaert AG). In the eyes of the workers and the trade unions, but also in the eyes of national or European political and official bodies, the European enterprise appears more and more as a threat: the multinational enterprise. "Somewhere" they carry on a policy which makes them inaccessible to a large extent for the national or local "powers": the social, economic, fiscal and financial public authorities, as well as the power of the organised workers in the separate enterprises or the national trade unions. How they do this we shall not analyse here. It is an important fact in our argument that at least at the European level it is necessary to arrive, in this "organised jungle", at collective agreements based on unity of vision, goals, method and action on the part of the workers concerned and their trade unions. The handicaps are great, but the need is just as great!

2. A European company law is a twofold necessity. In the constructive sense as a juridically structural and political contribution to the development of a Europe of prosperity and well-being. In a defensive sense, as a compulsory juridical structure for all multinational enterprises at the level of their activity within the EEC. Defensive in the following sense: the European and national public interest as well as the workers' interest demand it. A European company law is necessary for the sake of legal security, of the European industrial and social policy, of the definition of the rights and duties of capital, of the place of the workers in this whole, of the obligation to make the "accounts" frank and reliable, of the need at this level for arriving at collective agreements together with the trade unions, in a word of the reality of the European "enterprise".

I shall develop our views on the Commission's proposal concerning the European Company in the chapter on participation in this report. In this context, I wish to confine myself to stressing the fact that in trade union circles we are in general in agreement with the views of the Commission in this respect.

Art. 146 of this proposal provides that the working conditions of the workers of the European Company may be arranged by means of a collective agreement, concluded between the European Company and the trade unions which are represented in the different fixed institutions of the company.

Lastly, it is superfluous to point out that the context in which collective agreements must come about is entirely different depending on whether it is a question of the "organised jungle" of the multinational enterprises or of the European Company, such as the EEC Commission proposes and such as we, from the point of view of the European trade union organisations, propose by way of supplement!

The trade union strategy for arriving at good collective agreements will therefore be entirely different in the two situations!

In the case of the multinational enterprises within Europe, a unitary technocratic and capitalistic "power" seeks to profit, over the entire field of a European free market of goods, services, capital and of 188 or 256 million people, from the combined "weakness" of national governments, European political institutions, (Commission, Council and Parliament) in respect of industrial policy, planning, labour legislation and industrial relations, regional policy, fiscal, financial and monetary policy, and furthermore to profit from the combined "weakness" of workers scattered over many technical industrial units and of national and European trade unions in dispersed order and without a view of the whole. Gradually, a trade union strategy comes into being here around a few enterprises ... but there are not yet any tangible results . unless it be via the "national" enterprises concerned.

In the case of European Companies (and of National Companies), according to the combined views of the European Commission and of the European trade union organisations, we thus come in principle to other relationships, to clarity in accounts and responsibilities, to shared and balanced "power structures" within the company ... and thus to obvious confrontation of interest in European collective agreements. Trade union strategy and trade union responsibilities will thus also be different ... and man in the enterprise will do well in the process!

B—The European collective agreement per industrial sector

Doubts have predominated here for the past ten years among the trade unions. We have already developed the reasons for this.

"The International Federation of Christian Metal Workers Unions has made a start with the study of the possibilities and ways of arriving at European blanket agreements which would contribute to a gradual harmonisation of the working and living conditions in the EEC countries.

In a provisional report, it advocates the establishment of mixed committees per sector which would act as forum for consultation between the social partners.

In order to prevent the consultation from occurring and proceeding "outside the autonomous national organisations and to prevent the democratic opportunity to express views, which is definitely present in the national field, from being lost at the European level", the rapporteur P. Brussel, in the method of work proposed by him, includes the national organisations in all stages of the consultation and more particularly in the fixing of the agenda, the negotiation, the deliberation on the agreement reached, the final conclusion of the collective agreements and the special mandating of the negotiators with a view to the signature thereof.

Apart from the legal questions in connection with the possibility of concluding binding collective agreements at European level, questions which are not touched upon in the preliminary report by P. Brussel, it is mainly the circumspection and anxiety that have to be stressed in this report; circumspection and anxiety about treading on the toes of the organisations, as regards national autonomy."

In the already quoted resolution of the Trade Union Internationals of the European Organisation/WCL of 25 and 26 October 1971, it is however desired to go further:

"They note with satisfaction

(i) that the EEC Commission has decided to promote the establishment of joint committees per industrial branch as much as possible; they think
(ii) that these joint bodies must in the first instance accompany the dialogue;
(iii) that the trade union movement must be able to dispose of the powers and means of carrying out its campaigns at European level, with the adjunction of the necessary power;
(iv) that in order to arrive at an efficient consultation at European level, the European organisations must be able to dispose of the necessary powers, both for holding free discussions and for negotiating and concluding agreements;
(v) that the national trade union organisations must proceed to develop a formal occupational European Structure to which a part of their autonomy would have to be transferred".

In this context, we are of the opinion that the EEC Commission can and must do more in future.

The Commission has certainly already done useful work by issuing studies and reports on this subject.

"The Commission organised consultations of the social partners whereby they regularly had the opportunity of taking note of the development of social law by the collective agreements concluded in the six countries. In order to be able to make this information available in a more efficient and continuous way to the parties concerned, the Commission may go further and prepare a European *card-index of the collective agreements* of the six countries."

Still more important are the collective agreements at the level of the sector or of the whole of industry. As a first step, the Commission must develop a field of common interest that is obvious and which it knows well: the field of "fair competition" among the Member States in all domains where the actual life of the workers is involved. There is no competition about working conditions in the sense of living conditions. Large and small employers, large and small Member States must be able to agree on this point with the workers and the trade unions. The Commission can and must promote an arrangement of this via collective agreements which it can subsequently make compulsory for all concerned, even those who did not cooperate. Indeed, recommendations of the Commission with respect to occupational diseases, employment of juvenile and female labour, invalidity and industrial medical services, already point in this direction. These fields can be expanded parallel with the conception about "living conditions—working conditions" in various sectors as well as inter-professionally. The fact that thought was also given to this point in the Treaty of Rome is proved by the provisions of "French origin" about working hours and equal pay for men and women.

"In its blueprint, the Commission suggests collective agreements on the determination of the levels of professional skill, the establishment of compensation in case of closure or conversion of enterprises, and the harmonisation of working conditions."

Thus, the Commission will render credible what it wrote itself on page 80:

"The implementation of the social goals must likewise stem from the negotiations between the social partners. The autonomy of the latter, which is recognised in the Member States, must come to expression at community level, more particularly by the conclusion of European collective agreements, or at least by European collective agreements which must serve as *guidance when concluding* national collective agreements".

In this last sentence the Commission proposes a method to which the European and national trade unions can and must subscribe. Indeed; it seems to be advisable for the sake of trade union strategy that the European collective agreements should rather be worked out as "guidance" for the conclusion of national collective agreements. The advantage of this method is manifold:

i. the formula is flexible vis-à-vis the national trade unions;
ii. the formula makes it possible, at *the level of the enterprises*, of groups of

enterprises or of *sub-sectors*, to base oneself on concrete situations whereby account can be taken of the rank-and-file workers.

However, this method also implies that the national unions and federations should come together beforehand, sectorially or interprofessionally, at the European level, and thus reach agreements about what they will proceed to negotiate at national level.

Lastly, the same trade union organisations must subsequently meet regularly at European level in order to compare the results in the national field and to assess the progress made.

PARTICIPATION IN THE ENTERPRISE

1—The third theme that we should like to develop in this report is that of participation in the enterprise by the workers. We are fully aware that we are here using an expression that is contested, not least of all in certain trade union circles. If we nevertheless use it, this is not only because this subject, thus formulated, was proposed to us by our principals in the EEC departments, but indeed because we should deliberately like to take issue with this contestation! In fact, we could easily circumvent this contestation and carefully limit our terminology

(a) either to "democratisation of the enterprise", against which expression no one can or dares react!
(b) or to "workers' control", which expression is indeed sometimes advocated by the trade unions with respect to the given situation and the existing system.

We shall thus be dealing with "participation". As will indeed appear from the report, the expressions "democratisation" and "control" will also be used... In any case, it is our intention to avoid a war of words.

2—This subject is divided into two parts.

In the first part, we wish to develop the philosophy of "workers' participation in the life of their enterprise". In this way, we hope to be able to develop a sufficiently general—i.e., European—approach to the subject, so that we shall rise above "national" situations, achievements and obstacles, legislations and experiments, implementations and proposals.

In a second part, we should like to adopt a more concrete approach, but then at the European level. We should like here to develop the standpoint of the European trade unions with respect to the proposal of the EEC Commission for a Council regulation concerning the Statute for European limited companies.

3—As trade unionists, we would wish to base our argument on three recently published standpoints from the workers' point of view.

In the first place, the standpoint of our own national organisation. *The Belgian Algemeen Christelijk Vakverbond* (ACV) published its official standpoint in the form of a report bearing the title "Democratisation of the Enterprise".

We should then like to draw heavily on a report that one of our colleagues —G. de Swert—has written, under the title "Components for a Participation Theory", for the forthcoming Congress of the European Organisation of the World Confederation of Labour (WCL).

Lastly we shall, as we have already announced, base ourselves, for the draft "European Company", on the almost parallel standpoints of the European Organisation of the WCL and of the ECFTU.

A—Philosophy of participation in the enterprise

4—The demand for participation is a general demand in our society of the 1960s and 1970s. But the demand for participation in the enterprise is an equally general demand of the workers in our enterprises of the 1960s and 1970s

In this connection, it is noteworthy that in recent years we have heard the demand by the workers for participation in their enterprise—in these very terms—not only in the Western countries but also in the Eastern countries This is not of a nature to surprise us for the Western countries, where the enterprise system—insofar as it is dominated by capitalism, Taylorism and technocratic power—has for long regarded the workers as "hirelings" or "foreigners", "cost-incurring producers" or "expensive consumers", "underdeveloped" or "irresponsible" ... not as normal people with normal expectations and normal skills. We are of the opinion that President De Gaulle also realised this and thought of genuine participation structures ... but the distrust was too great on all sides.

Would not the entire phenomenon of the so-called wildcat strikes in our Western countries also be a reverse expression of the workers' demand for participation? Would not the so-called unreasonable wage demands of the workers be a prolongation of the employers' practice, whereby they fob off the workers' demand for human working conditions and for participation with wage increases and bonuses? Would not all the repugnance of the young workers for the work system be found to originate in the absense of any participation in the enterprise? Whereas these young people feel themselves to be "adult" and are "adult", they come to discover that not only they themselves, but all workers, are considered to be well-paid "adolescents".

Our surprise is however greater when we learn from the Polish press that the workers' revolts of December 1970 in Poland are to be explained, *inter alia*, by he neglect of the workers' rights of participation in their enterprises, although he official enterprise structures in that country recognise this participation. ociologists are able to tell us the same about the workers in Czechoslovak nterprises. The centralistic, state-run and collectivist structures here apparently nake their effects felt more strongly than the participation structures for the 'orkers in the enterprise.

'c could straight away link a provisional conclusion with these considerations: articipation in the enterprise presupposes structures as well as people. Or in ther words: people-promoting structures and structure-based people!

is, however, superfluous here to uphold our first assertion with a lengthy planatory comment: the demand for participation is a general demand in ır society of the 1960s and 1970s. In recent years, no other word has been such common use: in the church, in politics, in the university, in the mass edia, in the cultural world, in adult education, in operation with marginal oups in regional development . . . and in the trade unions themselves!

ovisionally, we may also conclude from this:

- on the one hand, that the trade unionists who jib at this "word" cannot swim against the general tide;
- on the other hand, that the employers who jib at this "reality" will not be able to swim against the general tide either. The enterprise is not an island in society!

-"This trend is a general reaction to disillusion. Once a democratic system s installed, as in the Western countries, the democratic ideal was minimal-d; it is now being maximalised again. Parliamentary democracy is regarded a great acquisition, but an acquisition that now calls for concretisation, for plementing by participation and by a democracy that makes its way up-rds from the grassroots. My newspaper must become our newspaper, my ool must become our school, and my enterprise must become our enter-se.

: history of democracy is neither more nor less than the process of increas-co-determination and cooperation of ever wider groups in society in the crea-l execution of decisions which affect this society. The present-day class iggle is the struggle between those who have a say and those who only have isten, between the bourgeoisie of the articulate and the proletariat of the rticulate".[5]

What do we understand by participation? This question must be asked, ause for a few years now political publicists, trade unionists, employers

port by De Swert G., quoted in the introduction

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[6] ACV report, quoted in the i

and lawyers have mastered an idea. This has not made matters any clearer. We should lose our self-confidence into the bargain!

However, we all know very well what Pope John XXIII meant just ten years ago when he said in plain everyday language that "the workers' desire to participate actively in the life of their enterprise is justified".

Active participation in life!

This is no legal jargon, but human language!

In principle, this embraces everything and nothing is excluded: certainly not the life of the enterprise.

In principle, this is valid at all levels.

Participation takes as point of departure the fact that there are people who act as such, who keep their human personality, freely and responsibly, who have their own autonomy of thought, speech, consultation and action. Thus workers' participation in the enterprise includes the group as well as the individual, the workers of the enterprise as well as the workers of the workshop, the workers who say "yes" as well as those who say "no", the workers who contest as well as those who associate, the workers as well as the workers' groups: the trade unions. Furthermore, workers' participation in the enterprise is characterised by the twofold way in which all forms of participation are expressed: by the recognition, valorisation and development of the worker in his work and in his enterprise and by accompanying guaranteeing structures of participation.

"One and the other inseparable together!"[6] Stated in yet another way: participation is the endeavour of the workers to acquire influence on decision-making and thereby on the progress of the enterprise, or of the economy. The nature of this influence, the form of this influence, the level of this influence may differ... but must be tangible. Exerting influence presupposes power and counter-power, but equally well dialogue and reciprocity, recognition of oneself and of the others reciprocally. Acquiring influence is not a question of countervailing powers which cancel each other out but which set each other in motion in order to act correctly. Obviously, the workers can acquire no influence and hence wield power if they are not informed, not correctly informed and if they have no means of checking the information. Workers' control in this sense is a necessary condition for workers' participation.

"With a sense of reality and through years of experience, the workers know that this participation will not be granted easily and that the participation in

[6] ACV report, quoted in the introduction.

power will not be allotted to them benevolently. In the strongest sense of the word it is a question of "taking" a share, i.e., of conquering, wrestling, getting back what has always been refused and denied them: a genuine participation in real power".

"Hence, we can then say negatively that participation is not to be reduced to a new form of a human relations movement; nor is it to be reduced to structural changes which are alleged to be the sole salvation. Participation is not the elimination of the trade unions or the trade union representatives; nor is it the organisation of a trade union guardianship over the workers.

Participation is not only a question of a top structure; but just as much of a basic structure. Participation is not the incorporation of the workers in the system; nor is it the "revolution" ex nihilo! . . .

Participation is not the elimination of the trade union struggle, of the "no", the "veto", "contestation" or the "strike"; nor is it the declaration of the "veto", "contestation" or "strike" to be a regime or system".

"The demand for participation in our modern world is a *general reaction* against the general alienation which the workers have already been *experiencing* for a hundred years in their work! . . .

Participation is a movement which constantly seeks to valorise man in his responsibility . . . even as far as the structures!

In this sense, participation is just as much a mentality, an attitude to life, a set of values.

This is not an easy process . . . it calls for constant effort on the part of those concerned, even with the best accompanying structures. But it is a process of liberation of the worker . . . and the trade union movement is precisely the instrument of this liberation!"[7]

7—Swords into ploughshares! We must apply this biblical image to the counter-arguments against participation. We must make arguments against into arguments for.

"In the employers' and financial world, participation is repeatedly contested on the pretext that the workers are not ripe for participation. But how can they be prepared for it if they are never put in a position to exercise it?"[8]

A hundred years of joint stock companies and nearly a hundred years of

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[7] op. cit.
[8] op. cit.

Taylorism must indeed mark deeply the mass of workers, while on the other hand they have known only fifty years' universal franchise, twenty years' full employment and high school leaving age.

Industrialisation, automation, thorough division of labour, Napoleonic organisation of the enterprise, the atmosphere of the hierarchical system, the limited perspective inherent in the work of an operator or office employee—the worker *lives for the greater part of his life in a social "underground". He can exert no* influence on his working conditions, he can develop no feeling for the goal and function of his work in the whole organisation of production, he can acquire no relationship to the work as a form of self-expression.

The typical form of an authoritarian structure in modern industry fails to cater for the individual need for self-respect and self-confidence.

The problem is however not only the absence of development chances. The problem has a social and collective character. legally, he hires his labour to a joint stock company; hence, impotence and the impossibility to change this situation, via participation in the decision-making in the enterprise. This cumulative effect has an influence, over a certain period, on the work satisfaction, on the value and meaning of the work".[9]

Thus, if we wish radically to reforge this argument against into an argument for, then we should have to go to the other extreme and postulate the self-responsibility of the workers' community of the enterprise. The term "workers' self-management" is somewhat misleadingly used for this. We shall revert to this point later. It will suffice to stress the fact here that this neither can nor may occur outright, in a turn through 180° from the present unilateral domination of the capital factor to a total domination of the labour factor. But all forms of participation, high or low, great or small, which move in this direc*tion are liberating for the worker and fit into our trade union strategy.*

A second counter-argument is of recent origin and is valid for the countries with a more or less capitalistic economy as well as those with a collectivist economy. It is strikingly reflected by the following remark by Prof. Galbraith on Belgian television. He replied to the question: "What is your view of the participation problem?" as follows: "Entirely hopeless. I advise you not to take any further action on this reform ... The very nature of the organised, bureaucratic management of a big concern monopolises power in the hands of

[9] De Swert G., op. cit.

the people who share in the information: specialised technologists and managers. Both the "capitalist"[10] and the worker are excluded from this".

After such a remark, what is there still to be said about participation?

We should point out first of all that this remark applies equally well to the whole of social and political life. The basic question is: "What then remains of the whole notion of democracy?" Our first reply is therefore a moral reaction: this may not happen ... in the name of democracy. We do not want to allow ourselves to be dominated by the technocrats, even not by the beneficent technocrats... simply because it may not be. Furthermore, Prof. Galbraith makes a caricature of participation, presenting it as though it is a situation in which a trade union secretary simply walks into a Board of Directors from outside and starts discussing the policy to be followed with the managers. Moreover, the workers do not ask to be assimilated with the professional expert function of the management, but they wish to exert influence on the policy of the management for important and long-term decisions. We shall see how below. But the workers' participation must be conceived as an overall, dynamic process of many and diverse forms of participation in an upward direction, taking as point of departure a broad basis at the lowest level. The workers' participation in the enterprise must finally be regarded in the whole context of participation of the citizens in society.

A third argument against connects up with the two foregoing ones. As the workers' participation in the enterprise is either excluded by the capitalistic system, or is impossible from the point of view of the imperatives of a complex technology and organisation, or else is, allegedly, not desired by the workers, then—so the reasoning goes—"compensation" must be granted to the workers in leisure time and in the consumer society!

This reasoning must be turned around as well, for put thus it strongly resembles a flight from the problem and even a guilty flight! The problem of labour and of the labour system is not solved thereby. Furthermore, production system and consumption system are one, and labour system and leisure time system are linked with each other. This is not to be denied. Consequently, the ills as well as the health of the one also affect the other, and the medicine

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10 For his part, Bernard Snoy writes in *Recherches Economiques de Louvain* (Dec. 1970): 'The ever growing interposition not only of the big limited company but also of the financial intermediaries between ownership of savings and their productive appropriation is acting increasingly as a screen to any power relationship proceeding from one to the other.
For its part, the power to decide the specific form which will be assumed by the accumulation of means of production seems to be concentrated more and more every day in the hands of the managers or, more generally, of the technostructures.
The latter is all the more absolute insofar as the enterprise is in a position to engage in self-financing, i.e., to combine the functions of saving and investment in equivalent proportions, which is the dominant situation in the United States'.
At the same time, this amounts to saying that the legal basis of the whole system of the limited company rests on nothing more than that!

for the one also serves for the other. If this is not so, then there would be no calling-in-question of the consumer society.

Thus we come to a general conclusion: logic demands that those who defend democracy as a general principle or in its parliamentary form should therefore defend democracy in the enterprise in principle. The forms and conditions can be discussed subsequently.

8—"Participation in the enterprise thus implies a change, to a greater or lesser extent, of the orthodox structure of authority, in which decision-making has become the "prerogative" of management. Modern management theories also make no careful distinction between various forms of participation, for the simple reason that participation for them is simply a management technique like any other, which can act as a stimulus for the specific goal of the enterprise: organisational efficiency. For them participation is not a method of decision-making, but a number of techniques that are aimed at getting the workers to accept decisions that have already been taken. The form assumed by this participation all too often involves absolutely no decision-making and must be stigmatised as pseudo-participation, the purpose of which is merely to create a feeling of participation via a technique aimed at convincing people.

9—Participation, on the other hand, whereby the workers have the possibility of influencing the decision-making, while the ultimate power of decision remains with the management is partial participation. Participation at the place of work is in most cases partial participation, and at the same time participation at the lower level: supervision of the daily activity at the place of work. On the other hand, participation at the higher level points to decisions with respect to the running of the entire enterprise, decisions concerning investments, marketing, etc. Partial participation is possible at both management levels. There is yet another form of participation at the lower level: groups of workers, who themselves arrange their work, virtually not under the leadership of the management and who take their own decisions in connection with the daily work process. This form gives a complete participation: a process whereby each individual member of the decision-making body has the same power to determine the outcome of decisions. In the same way as partial participation, complete participation is possible at the higher as well as at the lower management level, or at both levels.

10—*Examples (in Great Britain, Norway and Yugoslavia) prove that it is possible*, at least at the level of the daily work process, to change considerably the structure of power in the enterprise, so as to give the workers almost complete control over their work, and participation in a wide range of decision-making, even without any loss of productive efficiency—on the contrary.

A structure can be set up which, with the support of the trade unions, renders possible control in all fields that directly affect the world of labour: right to

The enterprise, a social institution, cannot possibly continue to function as personal enrichment for the owners of capital or as private organisation ground for a management acting in an ever more autonomous way. The joint stock company must be converted, in a first stage, into an enterprise company, whereby the capital factor, now regarded as primary, will only be valorised as one of the factors to be recognised in the enterprise, and whereby the labour factor will acquire an initial right of legitimation and control over the management, leadership and power.

This high participation, this influencing at the high enterprise level, may be established in various proposable forms of "equilibrium" between labour and capital.

13—Whatever form it may assume, this high participation may not imply any strict co-management, positive, direct, in the leadership of the enterprise, but indeed co-supervision of the management, limitation of the right to dispose of the property. Indeed, it could not imply these things in a modern enterprise. In this connection, we are faced with the management's own development, legally and structurally recognised as the Board of Directors (*Bestuur* in Dutch, *Directoire* in French, and *Vorstand* in German). In this discussion, indeed, the advocates of participation and, *a fortiori*, of self-management, are often pitchforked into a caricatural form of direct democracy. It is indeed not feasible to allow all workers to pass judgment on each technical problem in the enterprise. Nor can one still defend the point of view that efficient business management presupposes rapid decision-making (by one man or a few people). The most important decisions in a large enterprise are already taken in an interdisciplinary process of long-term planning. This evolution therefore makes it quite possible to hive off the entrepreneur's function· the long-term decisions can be transferred, for example, to a Supervisory Board (participation) and the management (staff) will then operate within this proposed framework. What is indeed involved in this group of problems is: how the expert knowledge is applied, how control over the activity of the experts can be built in

(i) at the place of work in a system of labour consultation;
(ii) at the level of the large department via a departmental council;
(iii) via the works council at the level of all workers employed in the enterprise;
(iv) via a kind of supervisory board, in which all interests present in and around the big enterprise are placed in a balanced way.

In the framework of these levels, the management will need to exercise a well-defined policy, and will need to lay down responsibility therefore, from which the consequences can be drawn".[11]

14—*Diversity, degrees and evolutions in participation*
Without entering into concrete formulae and without pronouncing an opinion

[11] De Swert G., op. cit.

must correspond. But the same anxiety to set up participation bodies for the various dimensions of the enterprise is just as valid for the various internal organisational and operational basic structures of the large enterprise. We mean here that consultative bodies must exist there, e.g., at the level of the sections and departments: sectional councils and departmental councils, where the representatives of the workers concerned meet the head of section or departmental manager.

In this way, an organised contact is created almost obviously with the participation at the level of the workshop. What we aim to achieve, in the large and medium-sized enterprises, is a pyramid of participation with a broad base and an apex. If this does not exist in an organised and structural way, then not much will come of a participation movement in the large and medium-sized enterprise. In this way, we hope to link permanently apex and base with each other, obtaining a movement in both directions, while the participation is developed organically, participation chances are created in accordance with the measure and interest of the various workers and the whole can be made into an instrument of democratic selection, indication and supervision within the workers' group itself. Quality will gain thereby!

We know that in the big steel concern *Hoesch Stahlwerke* in Dortmund, *52 000 workers are in principle involved each week in a downward and upward* circuit in an information and participation process. While the *Vorstand* meets each Monday, the worker chairmen of the various works councils meet with the labour manager each Tuesday. On Wednesdays, the works councils of the concern hold a meeting and on Thursdays the various members of the works councils meet the "delegates" of their respective groups and sections· 1 200 *in all. On Fridays there is consultation with the rank-and-file.*

At first sight, this appears to be German organisational mania. From a comparison with what does *not* happen in comparably large firms in Belgium —which we know well, after all!—we cannot but complain.

16—Participation in the enterprise, national planning and national economy must be interconnected. This may appear to be obvious, but nevertheless it calls for further explanation.

As the enterprise is a component of the national economy, there is incontestably a close link between the two. But there is no identification. Furthermore, *we would not wish for identification.* The census of the enterprises does not give the total of the national economy. The operating conditions, criteria and objectives of the one are not the same as for the other.

There is thus a problem of how both must affect each other. We should like to examine this from the point of view of participation.

Directly there is no relation between participation at the low level or participation of the "works council" type and the national economy. Indirectly, this influence may indeed be positive. A closer link with the national economy is already to be established in the presumption of forms of high participation by the workers in the large enterprises, in the industrial and financial holding companies and public enterprises. It would also be an important thing for the National Economy if the law on joint stock companies were to be replaced by an enterprise law with a dual team: "enterprise management" and a "supervisory board". In the latter, depending on whether it is a question of large enterprises or holding companies, a balanced and weighted representation would then be given to all the interests concerned: those providing capital, institutional investors, workers from the enterprise, trade union confederations acting in the interest of all workers, representation of the general (regional) interests.

Furthermore, it may be assumed that in such an enterprise structure the relationship with a democratic national planning body can be made easier than in the present system of large limited companies or capital holding companies.

But a problem also arises in another hypothesis of high but complete participation by the workers. We mean the workers' self-management or the system whereby the primary responsibility for the enterprise is given to the workers' community. Stated as a general idea or as ultimate goal, we must in the long term follow this path and there are no reasons for anxiety about this, for we see in the long term no other alternative in order to save "free enterprise"... unless one were to opt for the anonymous "technocracy" under the auspices of the limited company or else for the state-run enterprise, embedded in a centralistic state planning scheme. In the hypothesis of the "workers' self-management", a solution must also be given to the interplay and the incorporation of other justified interests: the trade unions acting for all workers, the regional interests, the national economic plan... and even the capital interest, even if this should be "public" capital interest.

We thus come, quite naturally, to two conclusions: the first relates to free enterprise, the other to the position of the trade unions.

17—The salvation of free enterprise resides solely in the workers' participation. Conversely, there is also no valid alternative for the workers other than participation in the enterprise. Other alternatives are to be rejected:

(a) flight outside the enterprise;
(b) the joint stock company, even if it were to pay high wages and be controlled from without by the trade union or the state;
(c) the technocratically managed enterprise, even if the technocrates were to be "enlightened monarchs";
(d) the nationalised enterprise raised to the status of system;
(e) the state enterprise, included in the network of a centralistic and collectivistic state planning.

But the defenders of free enterprise, of free initiative, of management, of healthy competition, of normal supply and demand relationships, of innovation, of creativity... in a word, of all that is good in our enterprise-wise constructed economy, must be aware that they will only be able to save the enterprise if the workers can speak, *de jure* and *de facto* of "their" enterprise! This can only happen in a bold process of low and high, partial and complete participation.

18—In any case, the trade unions must continue to play their own role and thus remain autonomous... in the optimum structure and the optimum practice of workers' participation in their enterprise as well. The autonomy of the trade union movement must remain guaranteed, even in a system of "workers' self-management". The role of the trade union movement is primarily external and secondarily internal: in the first place, it will have to act as "stimulus", as "executor" of the new structures and attitudes, as guide, as teacher and trainer, as guarantor for the system... and thus also as "controller" or "supervisor". An important field for trade union supervision is located here. The trade union movement will be involved in initiatives with respect to labour consultation, it will request certain guarantees at the time of works council elections, it will continue to stipulate collective agreements, it will continue to act... to contest, it will be present in a minority position as "guarantor" and "supervisor" in a supervisory board" and thus at the same time defend the interests of all workers and not only those of the local group... it will create and settle conflicts!

This role is sometimes delicate and difficult. Suitable forms will have to be worked out... but the trade unions must in any case remain themselves.

B—Trade union standpoint concerning the European Company

19—We have already explained in our introduction why we also wish to deal in this report with the proposal of the EEC Commission concerning the Statute for European limited companies. This is a concrete proposal, vis-à-vis which the European trade unions: the ECFTU and the EO/WCL, have published an almost unanimous standpoint.

In this report we must act on the assumption that the readers are familiar with the proposal of the EEC Commission, at least in its broad outlines and its general philosophy. It is mainly our intention here to add the trade union standpoint, so as to meet the demand for information as well as the demand for discussion and confrontation. In this connection, we shall base ourselves mainly on the statement of position by the EO/WCL of 11 March 1971. The ECFTU already did this previously on 19 October 1970.

20—*General statement of position*
It is encouraging to note that both organisations at the European level have

to such a large extent reached a unanimous standpoint. The *Societas Europea* —SE—is a desirable thing for European unification and will indeed come about sooner or later. The proposal for a regulation on the subject, originating from the EEC Commission, offers us an opportunity to introduce an "enterprise law", which will definitely move away from the generally contested "joint stock company law" and to ensure that the "European workers", the European recognition of workers, the European workers' interests, the representation of the European workers' interests, European trade unionism and European collective agreements, find acceptance in the European enterprise.

Unity in the European trade union movement about a step to be taken with respect to the development chances for the workers, by means of an SE in accordance with our ideas, will exert its influence at the political level and increase the chances of the acceptance of our theories at the political level.

The European organisations of trade unions may not now run the risk of giving our opponents an alibi, through lack of European unanimity, to limit as much as possible or even entirely exclude, at European level the representation of the workers in the SE and their influence on the policy bodies of the SE. For these reasons, the European trade union organisations are seeking for as great a unanimity as possible.

The leading national trade unions, affiliated to the EO of the WCL, can state their agreement on the following points:

(i) the necessity for the enterprises to recognise the trade unions as spokesmen of the workers in the enterprise and to guarantee the free exercise of trade union rights within the enterprises;
(ii) the necessity for granting the trade unions the right to negotiate collective agreements as well as enterprise agreements;
(iii) the right for the trade unions to be consulted on all important economic decisions and in particular on those with consequences in the field of employment and working conditions;
(iv) the necessity for informing the workers and their representatives, e.g. in the works council, honestly and in a suitable way;
(v) the necessity for granting the workers control rights in the light of various autonomous and structured forms of participation at all le[illegible] and under trade union guarantee;
(vi) the necessity to humanise work, also under trade union [illegible] taking as point of departure the everyday work milieux: office shop, even if this has implications for [illegible] structures [illegible]
(vii) the need for having a good works cc[illegible]
(viii) the refusal in the present circums[illegible] [illegible]nagement juridical sense by the workers; [illegible] the right to a positive and juridical sense an[illegible]
(ix) the idea of a form of workers' [illegible] as an ide[illegible]

and as final prospect of an evolution, according to various stages and in the longer term.

21—*Critical comments on the concrete proposals by the EEC Commission with respect to the "representatives of the workers in the SE".*

a) *The European Works Council*

The EO/WCL is obviously in favour of the setting-up of European Works Councils. *There is a special reason for this: they are composed exclusively* of representatives of the workers. The European Works Council can consequently genuinely represent the workers in the SE.

As regards the draft of the European Works Council, we give below a number of marginal comments and proposals:

Concerning the field of application:

Art. 100 provides that a European Works Council is only set up in an SE which has permanent establishments in more than one Member State. This implies that there would be no European Works Council in an SE with permanent establishments in only one country.

The EO/WCL can in no case agree with this, because it is a discrimination and furthermore it is not in accordance with the European objective of the draft regulation.

Concerning the number of members of the European Works Council

Provision would have to be made that each country where one or more permanent establishments exist may delegate at least one elected representative to the European Works Council. Furthermore, provision must be made for permission to add up the establishments in one country which have less than 200 workers, for the purpose of determining the number of representatives in the European Works Council.

Concerning the secrecy obligation

This may go too far, because the management may characterise anything and everything as "to be kept secret". The following would need to be added: "with the approval of the European Works Council". In case of contestation, the matter would then be transferred by the management to an appeal body "as provided in case of settlement of disputes".

Concerning the presence of a delegate of a trade union organisation as representative in one of the institutions of the SE

The EO/WCL deems it sufficient that *one sixth of the* members of the Euro pean Works Council ask for this. The majority of the European Works Counci need not decide this point. If one sixth of the members so request, the matte is in any case important enough to admit the trade union delegate for a opinion.

Concerning the obligation of the European Work Council to inform the workers

Art. 118-1 is too general. Provision would have to be made *expressly* for a least one form of information and consultation, i.e., joint meetings with th general meeting of the national works councils (workers' delegates), whethe or not supplemented by a meeting with the management of the SE and th leaders of the permanent establishments. The law would need to provide tha such a meeting should occur at least once a year. This appears important tc the EO/WCL, from the organic, but also from the trade union and European point of view.

Concerning tasks and powers

Art. 119 defines the general powers of the European Works Council: "To promote the interests of the workers". In principle, this is possible because the European Works Council is composed exclusively of representatives of the workers. The European Works Council can conclude agreements with the enterprises. These are legally to be regarded as agreements bearing on internal regulations. The observance thereof can be enforced, if not by other means, via the disputes committee provided for in Art. 128. But it must be made clear that a collective agreement has priority over these agreements bearing on internal regulations.

Special powers:

(a) information (Art. 120.2—Art. 121—Art. 122), a right of approval (Art. 123) and a right of opinion (Art. 124—Art. 125). We can agree with this as attainable in the present circumstances.

(b) to exercise supervision over the application of:
   (i) the existing legal provisions;
   (ii) the collective agreements;
   (iii) the enterprise's own agreements.

In general, the EO/WCL can agree with this, provided that the field of work-

ing conditions, concerning which collective agreements can be concluded, is defined in greater detail with the trade unions (Art. 146).

The special powers of the European Works Council go further in various aspects than is now the case in one or more national legislations.

b) *Concerning the settlement of disputes*

"The disputes committee is composed of members who are appointed in equal parts by the European Works Council and by the management of the SE, and an impartial chairman who is appointed in joint consultation by both parties" (Art. 128).

The EO/WCL is generally in agreement with this. It adds, however, that the European Works Council for its part would need to designate representatives, chosen on the recommendation of the representative trade unions (at European level). The intention is to promote European trade unionism per industrial branch by this means as well.

c) *Representation of the workers in the supervisory board*

The supervisory board is a general control board (Art. 73 + 78) for authorisation of acts of the management in specific cases (Art. 66.1) and for advise (Art. 73.2).

The EEC Commission proposes that the representation of the workers in the supervisory board should be arranged in a one-third proportion (Art. 137-1). The members of the national works councils elect the workers' representatives in the supervisory board (Art. 139-1).

The European trade union organisations ECFTU and EO/WCL propose, on the other hand, the following balanced structure: $^1/_3$ representatives of the general meeting of shareholders; $^1/_3$ representatives of the workers: both together elect the remaining $^1/_3$. The latter provision is made in order to oblige the first two groups to reach agreement on the composition of the third $^1/_3$. This balanced structure was conceived in such a way that:

(i) it could give confidence;
(ii) it could work and reach decisions.

In other words, the establishment of the power to supervise comes about in a bipartite power relationship: $^1/_3$ to $^1/_3$. The subsequent confidence is based on this. On the other hand, the exercise of the power is subsequently implemented by simple majority in a group, which is composed of three times $^1/_3$. By means of this formula, a normal operation of the supervisory board is ensured and the contrasts at the time of establishment of the power are more or less blurred by the execution.

The EO/WCL is altogether opposed to the formula $^{1}/_{3}$ to $^{2}/_{3}$, proposed by t EEC Commission.

If one really has in mind not only the interests of the workers but also t interest of the enterprise, and thus not only the interest of those providi capital or of the joint stock company, then the supervisory board cannot developed in such a way that the workers are organised unilaterally in t minority by the very structure of the institution. This is good neither for t workers nor for the enterprise. On the contrary, the EO/WCL interprets as an attempt to integrate the power of labour, by a falsified participati formula, in the structures of European capitalism.

The draft of the EEC Commission expressly confers on the Management tl task of "promoting the interests of the company and its staff" (Art. 70). this is meant seriously, then this management must be placed structurally such a position that it can cope with this twofold task. It so happens that tl role and composition of the supervisory board is such that the superiority one interest—the capital interest—is organised in the SE by the very structu of the Supervisory Board. How can even the best management be free vis-à-v this structured pressure in order to perform its legal task (Art. 70).

The formula of a minority presence of the workers has existed for a long tim in the *Conseil d'Administration* in France, as well as under the "minor co management" formula in Germany. In this connection, there is general agree ment—even outside the trade union movement—that this double example ha yielded no results. On the other hand, the experiment of the so-called "majo co-management", insofar as it is a question of a balanced structure in th supervisory board, is indeed positive in Germany, although it is not perfec and is not a final goal. This is confirmed by many scientific and parliamentar surveys in Germany.

Lastly, we should point to the lack of logic shown by the EEC Commission when it foresees, for disputes between the European Works Council and th Management, an arbitration institution on the basis of a balanced structur (Art. 128), but on the other hand provides, for the relations a minorit structure to the disadvantage of the workers (Art. 137).

Furthermore, the EO/WCL does not agree with Art. 139-6 in which it i provided that the list that receives the most votes and at least half of the vote cast shall win! This method of appointing the worker members in the supervisory board oppresses the trade union minorities. It would amount to th introduction of a kind of closed-shop formula, which is altogether contrary t our European trade union traditions.

d) *Arrangement of the working conditions*

Not least in importance in the EEC proposal are Art. 146 and 147, in which provision is made, via collective agreements, for the possibility of arriving at an arrangement of working conditions "between the SE and the trade unions represented in its permanent establishments" (Art. 146). This is incontestably an advance, especially as these collective agreements "are directly valid and compulsory for all workers of the SE, who are members of the trade union which is party to a collective agreement" (Art. 147-1)

We have, however, already dealt with this subject in another section of this report.

INDUSTRIAL DEVELOPMENT AND THE REDUCTION OF SOCIAL AND REGIONAL DISPARITIES (*)

M. P. FOGARTY

I—THE CONDITIONS IN WHICH POLICIES WILL HAVE TO BE DEVELOPED AND SOLUTIONS SOUGHT

I first underline four general conditions which are likely to influence the priority given to specific problems and the types of solution likely to be acceptable:

(i) The pressure for upward harmonisation.
(ii) The rising demand for diversity and choice, and resistance to standardisation.
(iii) The challenge to growth and shift towards quality of living.
(iv) No lessening in social tension and conflicts.

(i) *The pressure for upward harmonisation*

Pressure for upward harmonisation of the conditions of employment in the Ten can of course be taken for granted. For one of the two countries of which I am a national, Ireland, a main attraction of joining the Community is that to do so should end the tendency to look overwhelmingly to Britain for models for the next step in social policy. You may be sure that in studying the experience of the other Community countries it is not the most backward practice that we shall borrow. Trade unions, evidently, have a particular interest in upward harmonisation, but this process can already be seen at work in the worlds of the Civil Service and of public enquiries, of company law, of employers' organisations, and many others. To quote my own country again, I note for example that the Irish Commission on the Status of Women has been influenced by the facts about Community practice on the protection of the rights of employed mothers recorded in the draft Sullerot Report on The Employment of Women, and the Irish employers' organisations, as well as the unions, have sent expeditionary forces to study Community experience on workers' participation and *Mitbestimmung.*

(ii) *The rising demand for diversity and choice, and resistance to standardisation*

But upward harmonisation need and must not be taken to imply centralisation or standardisation. No doubt there will be particular cases where a general

(*) Original text

ruling for all Europe is appropriate. There will always have to be coordination, at least for example to the extent of ensuring that a worker who moves to a job in another Community country steps into a corresponding place in the hierarchy of pay, social security, and other rights. But a corresponding place is not necessarily an identical place, and in the area discussed in this report attempts to impose identity are likely to be strongly resisted for three reasons.

The first is the diversity of national systems of industrial relations and management and the strength of attachment to them. A most revealing example in recent years was the national debate in Britain, under both Labour and Conservative governments, which led up to the Conservatives' Industrial Relations Act of 1971. The case for changing the British industrial relations system in at least some of the directions envisaged by the Labour government and enacted by the Conservative successors was and is admitted on all sides, and by many trade union leaders among others. But the attempt to impose reform by law called forth, not a coolly logical analysis of the prospective gains and losses to each party—this sort of logic was often scarce even among academic industrial relations specialists, let alone in the trade unions—but a deep gut reaction whose origins lie a century and more in the past. The industrial relations systems of the Ten are in a number of ways moving towards one another, for example as plant bargaining and the role of the shop steward develop in certain continental countries, while Britain moves towards labour courts and legally compulsory plant procedures But anything that could rightly be called the standardisation of industrial relations systems is not for tomorrow nor even for 1980.

Secondly, in a sensitive area directly touching the ordinary citizen, such as industrial relations and the conditions of employment, there may well be resistance to dictation from outside the country, however excellent the intentions and however legal the authority of those who do it, on grounds of national traditions and national identity as such. Amid the crash of IRA bombs in Belfast, it is easy to miss something of even more long-term significance which was happening to the IRA and its political associate Sinn Fein in the Republic of Ireland before the trouble in the North began. A current of public support was beginning to run towards these radical nationalists out of a feeling that Ireland was going too far on the road to internationalising its trade and industry; towards encouraging foreign rather than native entrepreneurs, towards importing foreign styles of management and accepting the direction of multi-national corporations, and towards dismantling tariffs and other means of Irish control of the Irish economy. A vague, not always clearly specified, feeling was growing that the fight to maintain Ireland's identity was being lost on the business and employment front. This current has not been strong enough to stop Ireland's move towards the Community. But it could quickly become far stronger and more damaging if Ireland's self-determination were too sharply challenged in areas as sensitive as the conditions of work.

Thirdly, the growing diversity of situations and pace of change within as well as between sophisticated modern economies calls at both the national and the international level for polycentric rather than centralised management. I once heard a management consultant describe the history of wage and salary systems in modern societies as beginning with hand-made, and, so to speak, going on to standardisation and mass-production, and then on once more to hand-made, but on the basis of standard procedures and components. Pay systems today are not individual and hand-made in the sense of early industrial laissez faire. There are national, regional, and occupational standards to observe and rules of good personnel practice. But within the framework of these rules and standards pay systems are, increasingly, tailor-made to the requirements of each employer and occupation through plant or enterprise bargaining or simply the decision of individual managements. The situations of individual enterprises differ, and it is part of management efficiency to adapt to this and to be free to do so.

To this is added the effect of the accelerating pace of economic and social change. The faster and the more widespread change becomes, the stronger becomes the case for polycentric, participative, "organic"[1] methods of management, by contrast with the centralised, hierarchical, bureaucratic or "mechanistic" methods of business management and national planning appropriate in simpler and slower-moving situations.

A further reinforcement comes from the growing resistance of people in all countries and walks of life—shop stewards, students, and now increasingly those last bastions of the bureaucratic way of life, the middle managers—to standard and stereotyped rules for working and living imposed on them from outside and above, whether by employers, the state, or national union leaders. In the words of a slogan which I saw chalked across an Orange street in Belfast during the July 12th celebrations two years ago, "We are people". "Bureaucracy" has become a major term of abuse, and one of the most effective arguments used by the opponents of Europe against the institutions of the European Community.[2]

None of this is to say that the day of central planning and upward harmonisation is past. The rule of Keynesian economics applies here as elsewhere; when all decisions are taken polycentrically, on the basis only of local and partial knowledge, it is easy for a decision system as a whole to spin out of control and to produce results which none of its participants want. The trade unionist may then find himself faced with unfair differentials, wildly rising prices, and redundancy with no arrangements to re-absorb the men displaced; the business man with unfair conditions of competition; and the national planner with run-

1 The term coined by T. Burns and G.M. Stalker in *The Management of Innovation*, Tavistock, 1961.
2 I cannot resist adding that one of the most effective visual reinforcements of this argument is the glass and concrete reincarnation of a mid-Victorian prison in which the European Commission's own offices are housed.

away inflation and acute and unnecessary difficulties over exchange rates and the balance of payments. In future, as in the past, sound policies are likely to emerge from coordination, based on an overall view. But whereas at the end of the nineteenth century the accent in management and national planning began to shift from decentralisation towards central coordination, today the pendulum is swinging back. One of Marx's most successful predictions relates to this, and we are seeing it verified. In the world of work as in other spheres the role of central planners, in the socialist as well as the capitalist countries, is less and less to determine trends and more and more to register, promote, and coordinate those that emerge from polycentric decisions. It is less that of an engineer and more that of a gardener helping his hundred flowers to bloom.

(iii) *The challenge to growth and shift towards quality of living*

Before the new policies which we in this Conference are beginning to debate can be fully worked out and applied, the real income per head of the peoples of the Ten may well have risen by another forty or fifty per cent. Even the poorest of the Ten, Ireland, is already by world standards rich. The richest of the Ten will by then be approaching the present level of income per head in the United States. Opposition to the race for still further growth is already obvious in all our countries, and as the seventies go on is likely to be greatly intensified. As a candidate for the British Parliament in 1964 and 1966 I found it a good selling point to present a graph showing how much Britain, under both Labour and Conservative governments, had lagged behind the EEC countries in overall growth. I am not so sure that this would be good politics today.

The challenge to growth comes from two sources. One is the feeling that in racing for growth in gross national product we have neglected questions about how the product can best be used; problems of the environment, social justice, culture, participation. The other is the findings about world population and resources of Jay Forrester's "World Dynamics" and the Club of Rome project at Massachusetts Institute of Technology. Given the level of world resources and the size and rate of growth of world population, the MIT investigators argue not only that there is no possibility of bringing the vast majority of those living in the developing countries up to the material standard of living enjoyed in the developed nations, but that the developed nations themselves are very likely to see a marked fall in their material standard of living in the next thirty or forty years.

For the problems about the individual in the enterprise with which this report is concerned, this two-headed challenge has several implications. Upward harmonization of the conditions of employment may come to mean, not simply that the countries which lead in, say, pay and fringe benefits race ahead while others are encouraged to catch up. It may become necessary in the interests of Europe and the world to say to such rich countries as Germany or France: "Stop! You have enough!"—or even to tell them, so far as their own

material standard of living is concerned, to turn back. I would expect in th circumstances much stronger pressure to level up within as well as betw countries, and much less readiness to let high income earners and the weal retain their existing differentials over the rest of the people, even in absol terms and certainly not in percentages. Rising interest in the environment a the quality of life is likely to lead to a substantial re-distribution of finai and the work force between sectors of employment, with all the problems training or re-training, and of taxation, incentives, and incomes policy which this must give rise. Skilled and economical use of resources will be ev more important in a world where resources are seen as limited than in c where they seem abundant. But it will be harder in a world where the acc is on the quality rather than the quantity of production to defeat claims job enrichment or participation on the ground merely that they might redu the physical quantity of output. And I would expect in that sort of world see a great strengthening of the tendency which can already be seen develo ing to accent the social responsibilities of firms, which in turn will ha implications for such things as the form of their accountability, the role their chief executives, and the structure of their Boards. I share the view of number of my colleagues in management education that, just as such things marketing, quantitative methods, and management by objectives were tl management themes of the last generation, so the social responsibilities business, in the broadest sense business ethics, will be the theme of the next.

(iv) *No lessening in social tension and conflicts*

From all that I have said so far it follows that there is absolutely no reason t predict any lessening in social tension or conflicts in the years to come Certainly, as at present, many problems will continue to be solved by peacefu discussion and agreement, and policies and institutions which are now contro versial will come to be accepted as part of the common way of life. Germa employers have rightly insisted through many years that provisions of th Works Constitution Law of 1952 which they regard as admirable, progressive and a good basis for relationships in the plant and office would in many othe parts of Europe and the world be thought dangerous and revolutionary. It i illuminating, having noted this, to turn back to the very different tone of thei predecessors when these same provisions were first enacted in the 1920's. Bu new problems will arise, in the area with which this report is concerned a elsewhere, and the background to their solution will continue at least as ofte as now to be one of conflict.

Upward harmonisation of the conditions of employment can lead to conflicts of three kinds. One is over its pace. What rate of advance can each country stand? The lines of battle here are not always what they seem to be. If I look once more at Ireland, I see a conflict over the rate of harmonisation between on the one side the Government and not quite so whole-heartedly, the employers and on the other the trade unions. But the people most vitally involved are not visible on the scene of battle at all, for they are gone on the boat as

emigrants, or will do so when they tire of sitting on uneconomic farms waiting for the industrial job that never turns up because harmonisation, in this case principally with Britain, has been pushed too fast. There is also room for conflict over the strategy of harmonisation. If standardisation is rejected and national traditions are to be observed or created, just what are the practices which each country is to borrow from its neighbours? And another ground for conflict again will be about how to go about harmonisation as growth slows down or even stops, given the very tricky issues arising from this to which I have just referred.

It is the same in other areas. The battle over the extent and subjects of workers' participation, and especially over sharing power at the top, is likely to be with us for a long time yet. It may acquire some interesting new angles as and when the middle managers, the *cadres*, the *Leitende Angestellten* get into the act. It is not easy to play Louis XVI once the *cahiers* of grievances are edited by the nobility and clergy as well as the Third Estate. I have seen it happen in a recent industrial enquiry where I was involved: managers joining the rank and file in revolt against their Board, and heads rolling at Board level as a result. And to see the conflicts that can and will arise over centralisation and decentralisation one has only to look at the history of incomes policy.

In some societies it might be possible, at least for a time, to suppress conflict over issues like these. At a time when prices in the advanced market economies were rising at about 3% a year, the governments of a group of Socialist countries dictated their price and incomes policies ruthlessly enough to keep the average rise in prices down to 1/2%: the rate of increase of real wages was the same for both groups of countries.[3] The Japanese lifetime employment system provides a great deal of security and freedom for executives who manage to enter the charmed circle of one of the big corporations though at the expense both of confining their own careers within a Berlin wall and of consigning less fortunate competitors to chaos and outer darkness. There could be a temptation to adopt Japanese or Soviet methods in the Europe of the ten, but I make the assumption that, because Europe is Europe, this will not happen. Organisation Man exists in Europe, but I do not see him, in Japanese or any other version, being increasingly accepted as the model for the future Efforts will and should be made to damp conflicts on issues such as incomes policy. But whatever may happen towards the East, the Europe of the Ten is and will remain an open society, and in the last resort conflicts like these will be allowed to break into the open and take their course.

[3] H.A Turner and D A.S. Jackson, *On the Determination of the General Wage Level – A World Analysis*, Economic Journal, December 1970. The period studied was 1956-1965.

II—SPECIFIC AREAS WHERE POLICIES ARE REQUIRED

Against the background of the four general conditions which I have just described, I take up now three areas in which new thinking and long-range policies are required. These are:

(i) The job and career in itself: flexibility, enrichment, security.
(ii) The sharing of income and wealth.
(iii) The sharing of power, including the role of the chief executive and the question of company objectives.

(i) *The job and career in itself: flexibility, enrichment, security*

Of the three issues of security, flexibility, and job enrichment, security is particularly important in a number of ways, not all of them obvious. I shall therefore take it last, bringing into its discussion issues relevant to it which arise on the two other points.

To start with flexibility; one of the most obvious changes in recent years, and one likely to be carried much further in future, is the decline in many occupations, both manual and white-collar, of the tradition of a straightforward career in a single profession, based on an initial qualification plus experience on the job, and sometimes also on commitment to a single employer. Several factors have combined to bring this decline about.

One is the increased pace of technical progress, which makes it necessary even for people who follow a continuous career in a single field or with a single employer to re-train at intervals, and not only by learning on the job. The point is not merely that these people themselves have to re-train. It is that this re-training could equally be available to people switching from other employments. People already in a field, or already employed by an organisation, still have an advantage over those who come from outside. But part of their advantage is gone, and a further part is offset by the importance in today's conditions of thinking sideways and the fresh mind. It may be precisely the man with different experience who can learn fastest in a new situation and has the most positive contribution to make. It begins increasingly to appear neither efficient nor just to deny him the chance to make it. New occupations are in any case now continually arising and have to be manned from scratch, and here it is natural for the field to be open to all.

Another factor is an increase in job-changing in occupations where in the past both mobility and the risk of redundancy were small. Partly this occurs by people's own preference, especially among younger workers. By the mid-sixties a British survey showed that graduates tended to leave their first firm after an average of no more than four years in the case of men and two in that of women.[4] But technical and commercial change, mergers and reorganisations,

[4] Graduate Appointments Register, *Salary Survey*, October 1966.

have also led to much more compulsory job-changing in mid-life than was usual in professional and managerial work even a few years ago.

A further factor has been the appearance in the labour market, at all levels of skill and responsibility, of a growing number of married women. A survey of recent British women graduates brings out that the great majority of them intend both to work through most of their lives, whether married or single, and even in the case of those most strongly committed to a career at a level matching their qualifications—to drop out altogether or at least down to part-time while they have young children.[5] The lives of most women run to a different timetable from men's, and employers who wish to make effective and economic use of their services have to come to terms with this; with part-time, with careers that break and re-start, and with able staff who qualify for promotion at what in a man would seem a suspiciously late age.

Fourthly, a new appreciation is growing of the complexity of the problems of older workers on their way to retirement. On the one hand it is now clear that able people are far more likely to retain and develop their powers into old age than had been realised, especially if they are offered the chance to meet new challenges and are not left to sink into a rut. It is also clear that it is often a loss both to the older worker himself and to the community to cut his work activity short at a predetermined retiring age. But on the other hand experience and research also show, both for men and, especially, for women, that older workers at all levels of skill and responsibility often prefer to ease themselves out of work before standard retiring age, not necessarily or even normally by taking less skilled or responsible work, but by working at less pressure or for shorter hours. The case thus builds up both for more challenging work and more chance to continue beyond standard retiring age for those older workers who can use it and wish to use these opportunities, and for more chance for those who so choose to move towards at least partial retirement earlier.

Each of these factors has repercussions beyond its immediate area of application. If concessions are made to mothers because of their family responsibilities, fathers too are likely before long to make their claim, and rightly so. If part-time is available for older workers or for women, why not also for men who are students or have other non-work interests to which they wish to give a substantial part of their time? Examples of both these extensions can already be quoted from several countries.

Taking all the factors together, it is clear that the timetable and occupational pattern of careers is likely in future to be very much more complex than in the past, and more flexibly adapted to individuals' situations. For employing organisations and trade unions this implies a need to press much harder and

[5] M P. Fogarty and R & R. Rapoport, *Sex, Career and Family*, Allen & Unwin, 1971.

encouragement given to those who wish to move from full to part-time or into retirement. Whatever the mix of solutions chosen, it is important that they should be of this positive kind, in the interests not only of efficiency and personal satisfaction but of social stability. The past has left us some sharp warnings of the dangers of a massive population of people highly educated but under-employed.

Secondly, it is important for both efficiency and satisfaction to understand that the enrichment of jobs requires not only upgrading of the demands made by each job in itself but the incorporation of each job into a demanding group process; and an improvement not only in the technical and intellectual capacity of job holders to cope with their job but in their motivation to make the best of it, their achievement motivation. Thorsrud's experiments in Norway show how the re-design of working groups can help not only to raise current efficiency and work satisfaction but to touch off a group learning process which raises performance to continually higher levels by a chain reaction within the group itself. The success of this chain reaction is finally established, as Thorsrud has said, when it begins to produce results which the authors of the re-design could not themselves have planned or foreseen The work on achievement motivation of McClelland and his followers shows how to give people an internal motivation not merely an external stimulus such as pay or an interesting job—to use their work situations to the best advantage: not exploiting or in a bad sense profiting from their jobs but using their opportunities they offer to the full.

Anyone who has worked in a number of organisations will be familiar with the difference between an organisation that is dynamic and one that is soggy. The director of a soggy organisation must drag or drive it. The director of a dynamic organisation rides high on a wave of initiative. Dynamism or sogginess is a result of the whole structure and functioning of the organisation, not of any one part of it alone. But an essential and in the most literal sense basic component of it is the dynamism or sogginess of individuals at all levels in their individual jobs and their immediate work groups. It is this rather than routine efficiency or even short-term job satisfaction which is the chief target of job enrichment.

The implications of this extend far beyond the individual firm or employing organisation. My colleague Richard Lynn has explored in several studies the relation between tension or anxiety and achievement motivation, and suggested how this can be related to national economic performance. In a rough and ready way one might set out the contrasting situations of two types of economy:

The Motivated Economy	*The Reactive Economy*
Strong, autonomous motivation of individuals and work groups to achieve.	Individuals and work groups react only under pressure and inducements.

Therefore
Ahead of the competition
Profits and investment capacity good
High growth, little inflation, good balance of payments
Government assists rather than harasses business.

Therefore
Climate for enterprise improves still further: upward spiral.

Therefore
Always a step behind the competition
Profits and investment capacity low
Low growth, high inflation, weak balance of payments
Government hard-pressed: drives and harasses business.

Therefore
Deteriorating climate for enterprise: downward spiral.

I leave it to readers to fit the names of organisations and countries to these cases.

Security, finally, has a number of aspects, not all visible on the surface. The cruder forms of insecurity are obvious enough, for example redundancy or arbitrary treatment by superiors. But there are also subtler forms of insecurity which may affect even those who are in no fear of losing their jobs or of crude discrimination. Flexibility of careers means more security for those who wish or have to switch their careers, but less for those who in its absence could have relied on climbing straight up a regular career ladder. Though bureaucracy can be in many ways unsatisfying to the bureaucrats, they at least know where they are in it. A network system of management, where work groups and lines of responsibility shift continually and unpredictably, can be much more satisfying, but at the expense of greater insecurity. As always in human groups, it is likely that some who take the lead will enjoy the satisfactions while others, more passive, experience chiefly the insecurity. A wrong choice or ineffective use of a system of management means insecurity for those who have to work under it; perhaps in the sense of losing their jobs, however humanely dismissals may be handled, but certainly also in the sense of confusion and uncertainty about what is supposed to be going on.

For some groups of workers insecurity arises before they come near the job at all. The question is, precisely, whether they are to be allowed to do so. Are women, especially married women, to be allowed free access to jobs; actual and effective access, bearing in mind that legal and constitutional rights are one thing and the practice of business and public organisations is another? What opportunities are to be left to older workers who seek promotion, or wish to enter a new craft or profession, or simply to change firms: how absolute is the rule of promotion from within? How equal are to be the opportunities for immigrants, or for late developers who did not acquire the right piece of paper from the right institution at the right age? For these people insecurity means to be cast into the outer darkness, or to be in danger of being so at the first sign of recession, while the privileged feast within behind closed doors. Their problem has always existed, is aggravated in the down-swing of employment

cycles, and is likely to be intensified in future as awareness of the dangers of unlimited expansion of production grows.

Some of the cruder problems of insecurity are being more and more effectively tackled, and this will no doubt continue in future; for example by stronger protection against arbitrary dismissal or against discriminatory employment practices. But when all the problems of insecurity are taken together, there is no reason to suppose that they will be less acute in future than in the past. Specific problems of insecurity need specific solutions, for example measures to improve training opportunities and the working of the labour market for displaced workers of all grades, or measures, legislative or other, to guarantee more equal opportunity to women or older workers. I stress particularly, however, the more general point that, as in the past, the best safeguard against insecurity will continue to lie in powerful and effective trade unions and professional associations, and in effective machinery at the level of enterprises, industries or professions, and government through which unions and professional associations can act.

This is not purely a trade union argument. Looking at the insecurities created by network or "organic" systems of management, certain investigators have concluded that the answer is to emphasise the individual's "professional base". He has a place in the network of management, but it is an ever-changing one on which he cannot rely. But he also, especially if he is a qualified specialist, has a more lasting and in any case an alternative base in association with others who share his line of work, whatever their place in the management network. The suggestion is that it will be even more necessary in future than in the past to emphasise and use this alternative base. Developed purely from a managerial point of view, this argument underlines the traditional and correct view of trade unions that the first and best answer to insecurity is not to put all one's eggs in one basket, but to acquire through the union or professional association a separate and independent base of power and influence, to be used either in the employing organisation or out of it, for instance to promote legislation. A significant change today is that this argument *is increasingly* seen as applying to the manager, scientist, and technologist as well as to the rank and file, and the reality of this is underlined by the rapid recent progress in one country after another of managerial and professional unions.

It is important that the role of the union or professional association should be wide enough to deal with all the main causes of insecurity. I studied recently the background to the six months' stoppage of the Irish banks in 1970, which provided Ireland with one of its few world records. It emerged that one factor contributing to the explosive atmosphere *before* this stoppage—I will not say the most important factor, but certainly a contributory one—was the failure of the powerful, militant, and in other respects efficient Irish Bank Officials' Association to come to grips with the business and managerial revolution going on in the banks and the impact of this on its members' psychological as well as material security.

But it is important also that the "professional base" should not be stressed to the exclusion of other channels of action. This is particularly true of those for whom insecurity arises not so much on or out of the job as from being excluded from it. Unions and professional associations tend to be very much more effective in looking after the interests of those already within the charmed circle than of those looking in from outside. There will be a major battle to be fought in coming years over how to deal with problems of apparent over-supply of labour such as those already arising from the rising tide of education, or which may arise as the case against racing for further growth begins to bite. Are they to be solved by re-excluding certain categories, such as older men, immigrants, or married women from the opportunity to work, or by more positive measures? These more positive measures could as I have said include expanding work opportunity or sharing it through shorter hours and longer leave and other work breaks. They will need also to include revisions in, for example, the system of social security and family allowances, so as to blunt the argument that the standard of living of families can be upheld only by giving absolute priority for full-time and over-time to their chief earners.

The trade union movement will certainly have its part to play in this battle. But I do not believe, on their record in any country of the Ten, that the unions alone can be relied on to put the case of the excluded or potentially excluded categories with the force that is required. Nor, of course, can one rely fully on management. For this is once again the sort of area where managers, preoccupied with keeping their organisations going here and now rather than with long-term plans or the needs of the economy as a whole, or the welfare of particular interest groups, tend to play it by ear and avoid positions of principle, and actions not clearly and immediately necessary.

(ii) *The sharing of income and wealth*

The starting point under this heading is the simple observation that no modern state can carry out fully its responsibility for guiding the economy unless it has a policy for incomes and wealth. Whether it calls this an incomes policy or not is a matter of political taste. The present Government of Britain refuses to have an incomes policy. But this does not in the least prevent it from having a powerful policy for incomes, whose weight negotiators in a number of fields have felt.

Moreover, policy for incomes and wealth cannot be confined to measures of redistribution through taxes or social security, leaving the initial distribution of income and capital to market forces alone. Market forces will produce some distribution and rate of growth of incomes and wealth, but which distribution they produce depends on the parameters within which the market is made to operate. To understand why differentials in earnings between different industries, firms, and occupations are what they are, and why earnings change as they do, it is necessary to look not only at broad movements in the national

economy or in supply and demand in particular labour markets but at such things as:

(a) the limits set to market forces by custom, practice, and expectations about differentials and about the fair relation between pay for different occupations and sectors, and the margins of tolerance accepted around these limits.
(b) the limits set by oligopoly or by deliberate control of either product or labour markets.
(c) the assumptions built into negotiating practice in particular forms or sectors, for example about the negotiation and operation of incentive schemes. Given a knowledge of these, a current British study shows, it is possible to forecast the degree of wage drift in a firm or sector rather precisely.
(d) current expectations about price and pay increases. In recent experience it has proved less easy than in the past to predict the rate of increase of salaries and wages simply from a knowledge of demand and supply in the labour market, or of these together with the movement of prices These factors explain part of the increase, but a substantial part remains to be explained in other ways.

One cannot simply kick the market in the teeth. Once certain limits, varying from country to country, are reached the forces of supply and demand break through. But these limits are wide, and there is a choice to be made within them. For a given economy or firm no one pattern of pay or degree of inequality in it is likely to be uniquely associated with competitive survival. It is for policy-makers to choose, with a wide degree of freedom, and from the point of view either of efficiency or of social responsibility, whether to have a relatively flat or steep gradient of differentials and relatively wide or narrow margins between different occupations and industries; whether to encourage or discourage the use of piecework and incentives; or what rate of wage and salary inflation to tolerate.

For some purposes the relevant policymakers will be those at the level of the firm or industry. But many problems in this area can be solved only at the level of each economy as a whole, or indeed, as where the balance of payments becomes part of the problem, at that of Europe as a whole or of the world. The economics of Keynes and Pigou apply here as elsewhere. Uncoordinated pay decisions can and do spin upwards into inflation. They can fan out into a pattern of differentials which, as has been shown in a recent enquiry in Ireland,[6] people in all social classes regard as inequitable and would have rejected had they had the choice. In a case like this it may be easier to set out to change the system as a whole than to leave it to individual employers and unions to adjust case by case; for the employer who changes differentials on

[6] H Behrend, A Knowles, and J. Davies, *Views on Pay Increases* (two papers), Economic and Social Research Institute, 1970.

[illegible] take the option of disinvesting or leave some of his staff employed or similarly qualified people elsewhere. The trade-offs needed to win support for large-scale reform of pay systems may well include items for instance changes in [illegible] or social security, which are outside the control of ordinary negotiation altogether. Knowledge which might encourage action by individual industries or enterprises, for instance about productivity bargaining or the side-effects of payment by results, often circulates less fast from firm to firm than a country's or industry's situation requires, and action at national or industry level may be needed to speed its circulation up.

Widely contrasting views about incomes policy are held within as well as between the countries of Europe, and it is neither likely nor desirable, seeing the variety of national problems and traditions, that uniform policies will be established among the Ten. But, as I have said, no country can avoid having some policy for incomes and wealth—I refer to wealth in a moment—and the policy cannot be kept in narrow limits. One of the lessons of incomes policies to date is that it is neither useful nor even practicable to separate, for example, policy against wage inflation from policies to deal with low pay, prices, rents and dividends, unemployment or the position of pensioners. I have already suggested, and it is still more the lesson of the future, as and when growth slows down, and there is no longer an expanding cake from which everyone can claim his extra slice without depriving others of theirs.

Over and above these considerations about individual countries, the incomes policy of each country affects its relations with its neighbours. It is hard to conceive how a European monetary and fiscal union could work successfully without the help of coordinated—not, as I have just insisted, identical—policies for incomes and wealth in each of the Ten. One of the major tasks of the European institutions is to help to bring this coordinated network of policies for incomes and wealth into existence in a field still in many ways chaotic and experimental. I return below, under the heading of the sharing of power, to the practical problems of bargaining an incomes policy into being and seeing that it is effectively enforced.

A policy for incomes, if it is to be effective, must include a policy for wealth

It has become increasingly clear in the last few years that in today's conditions no pattern of incomes is likely to be acceptable for more than a short time unless it is accompanied with an acceptable pattern for the ownership of capital, and especially of the equity capital of business with its voting rights and its ultimate and unlimited claim on profits.

Till a few years ago a large part of any discussion about the wider ownership of capital, and especially about employee share ownership, was likely to be concerned on the one hand with ways and means and on the other with whether there was any demand for policies of this kind at all. Changing the

right scheme to suit each case does still, of course, remain important, but there is no longer any question that practicable schemes are available. They include single-firm schemes and national schemes, traditional schemes to promote ownership or (as with British Savings Certificates) long-term savings through state channels, and more novel and variegated schemes such as, in Germany, the DM 624 Law and a variety of plans set up by collective bargaining, or in France the decree of 17th August 1967 on employee participation in reinvested profits. A powerful armoury of schemes exist, and there is today no longer any doubt about the demand for them. At one stage the pressure for wealth-sharing plans came largely from employers and the political centre and Right, and even from these quarters received only minority support. Labour movements were more likely to be concerned with the taxation or nationalisation of wealth, not with sharing it directly among the workers. But today support from employers in several countries has increased sharply and a growing number of trade unions and political labour movements have become actively interested in direct sharing. The British Labour Party, hitherto one of the most reluctant in this respect, is now examining schemes of the type put forward some time ago by the trade unions in Germany.

The motives of the various groups interested in policies for wealth of course differ. But in a general way the driving force has been recognition of two facts about the way in which modern economies operate. One is the speed at which capital needs to accumulate in them, the massive size of the accumulation, and its effect on the distribution of incomes as well as wealth. The problem of the distribution of wealth is not simply an inheritance from the past, to be disposed of at leisure. It is continually building up, and must be dealt with as it arises. Secondly, there is the social nature of much of this accumulation. A large part of it represents, not personal abstinence giving rise to a clear personal claim to ownership by individual investors, but an allocation by corporate executives of corporate funds, derived from taxes or (what in oligopolistic conditions is much the same thing) price margins levied on the people as a whole, and from the efficiency of a corporation's whole work force. Given these facts, it has become more clearly understood that it is not possible to arrive at a socially accepted distribution of personal resources, and so at social peace, simply by bargaining over income or taxing past accumulations of wealth. There must be policies for the current accumulation of wealth as well. But what sort of policies are these to be? The questions to be answered over the next few years are of four kinds.

(a) *What for?*

Two broad purposes can be distinguished; to improve the distribution of wealth, including familiarising people with the advantages and problems of holding capital: and to give them the control that goes with ownership, especially a share in the control of business by way of employee shareholding. Is the purpose of employee shareholding to distribute wealth or to obtain control? The practical implications are very different. A small investor, planning

the optimum use of his personal resources, will usually be advised to spread his interests. He will in any case want to keep them flexible, and to switch investments as his advisers indicate; and usually he will prefer to act as an individual, or at most as a member of a voluntary club. If on the other hand the purpose of employee shareholding is to build up in employees' hands a block of shares large and concentrated enough to obtain a significant share in control, or at least to focus employees' attention strongly on the profitability of their own firm, it is likely to be necessary to limit employees' freedom to dispose of their shares, and perhaps to focus their voting rights through a trust or other institution. My own judgment would be that a share for employees in control, and an active interest on their part in their firm, can be obtained at least as well and probably better by other means. The primary objective of employee shareholding as of other policies for wealth should therefore be to optimise the distribution of wealth, not only by multiplying small investors but by encouraging them and putting them in a position to spread their interests as effective small investors should.

(b) *For whom?*

It would clearly be unjust if employees in profit-making business, and especially in sectors where there is heavy reinvestment of profits, received over and above their pay a share in capital such as would not be available to the staff of public and other non-profit services. The question here is of ways and means. Is the answer to transfer part of the capital available for sharing among the employees of profit-making business to a trust for the non-profit sector? Or to issue shares or capital certificates against the self-invested income of those public concerns which have any? Or are there other alternatives?

(c) *Individual or collective?*

Policies for the wider ownership of capital will always be concerned largely with encouraging individual ownership, for example of houses or personal savings. But often there is a choice between promoting individual, co-operative, or fully collective ownership. So far as work-based property is concerned, this arises especially over the ownership of pension funds and of companies' capital. Pension funds can be controlled by employers, by an independent trust, cooperatively by a fund's participants, or under collective bargaining. They can incorporate varying degrees of individual choice over contributions and benefits. They can simply pay pensions, keeping any underlying capital assets in the hands of the fund; or they can turn over part or (as in the scheme to which I belong myself) all the assets underlying a pension to the pensioner himself. Companies' capital transferred to the ownership of small investors can be put at their individual disposal or, whether or not registered in individuals' names, can be held and administered through a trust fund. A number of trade union movements have already made it clear that in the case of companies' capital they prefer transfer to a national trust fund—or more than one fund, to avoid monopoly—rather than to personal

ownership. If and in so far as companies' capital does become transferred to personal ownership, the further question arises: how fast is it safe to move towards completely free personal ownership, bearing in mind the need to educate new holders of investment and to avoid the dispersal of capital?

(d) *How far and how fast?*

In the past, policies for a more even distribution of the ownership of capital, especially companies' equity capital, operated on a modest and marginal scale. With the new and more powerful tools available today, for example the technique used in the French decree of 17th August 1967—perhaps combined with the British Liberal Party's proposal to require companies to buy up and transfer to employees a small percentage of their issued capital each year—it would be possible within a generation to convert all large and established business into something close to Yugoslav communes, or if it were preferred to leave small investors free to invest where they like and to spread their interests, at least to make them by far the most important element in the capital market.

There need be no reason to fear that a shift in the capital market towards the small investor will lead to a shortage of capital. A very substantial part of the saving credited to small investors will continue to be institutional, and could well turn out to be not merely maintained but increased One classic and, to the investor, particularly attractive form of small saving is contributions to funded pension schemes. It can be shown that this source of capital by itself is capable of enough expansion not merely to supply the capital market but to over-supply it. There is no reason to suppose that crediting the value of ploughed-back business profits to small owners will reduce their volume, and there is some evidence both from classic types of small ownership, for example in farming or shopkeeping, and from Yugoslav communes that it might lead to a demand to increase both profits and investment further. Nor need a shift from highly concentrated to dispersed ownership prejudice the continuation of a market economy, whether in a capitalist or, as in the Yugoslav case, a socialist form. I treat the Yugoslav case as one of widely dispersed ownership since, though the assets of a Yugoslav enterprise remain social property, the right to the profits arising from them is transferred by law to the members of the enterprise.

There remains the question: given that a revolution in the balance between concentrated and dispersed ownership is now possible, how far down that road do we in fact wish to go? If the answer is that we wish to go a long distance that way, other more technical questions arise about the way to operate a capital market in which the small investor predominates. What types of institution, for example, will then be needed to ensure that the shareholder's point of view is effectively brought home to managements, seeing that the individual small shareholder is unlikely to be able to bring influence to bear except through disposing of his shares on the market? How can stock markets be better organised to meet the needs of the small investor? At the level of

Europe as a whole, questions will arise about how to deal in the case of companies operating internationally, or of "European" companies, with differing national rules about the dispersal of ownership. Harmonisation, or at least coordination, of these rules is of marginal importance so long as the impact of the rules themselves is marginal. The impact that I am envisaging here could be very substantial indeed. But the first question is the crucial one. We can have a revolution in the ownership of capital: do we want it? My own answer would be decisively "yes".

Whatever the course chosen, it is clear that the profit and investment plans and policies of enterprises will increasingly pass out of the exclusive responsibility of owners and directors and into the area of bargaining and political decision, whether at the level of the enterprise itself, of individual countries, or of Europe as a whole. There is a case for recognising this by moving from traditional profit and loss accounting, in which profit is treated as a category apart and other types of income—wages, salaries, contributions to taxation or community enterprises—as costs, to net value added accounting in which all these categories appear as shares in an enterprise's net income after deduction of payments to outside suppliers of materials, equipment, and services, and all had to be planned for and bargained over on an equal footing.

(iii) *The sharing of power including the role of the chief executive and the question of company objectives*

I set out here from the conviction that the four general conditions with which I began this report point severally and collectively to two trends. One is towards a further growth of participation by employees at all levels in controlling the conditions and decisions under which they work. The other is towards basing participation not simply on consultation but on a realistic recognition, use, and institutionalisation of power. The rising demand for diversity and choice and resistance to standardisation and bureaucracy obviously points to the further growth of participation. So does the rising accent on the quality and especially the human quality of living, including the right to responsibility and participation. People are as I have said likely to be less and less ready to be put off by the argument that material efficiency must come first, and that participation should be resisted because it might interfere with it. From the fact that social tension and conflicts are unlikely to diminish it follows that the accent on participation is likely in future to be at least as heavy as now, and very possibly more heavy, on sharing power by way of bargaining and legal regulation. And the pressure for upward harmonisation is likely to imply, as it has already done in drafting the constitution of the "European" company, that innovations and advances in participation in any one country are likely to be taken up rather quickly elsewhere.

Before I come to particular areas where further development of participation is likely to be needed, I make a general point. One of the lessons of the past

which is likely to apply still more strongly in future is that it is a mistake to treat forms and problems of participation separately from each other or to argue in terms of either-or. It is a question of system-building, of designing, in the admirable German phrase, the "works constitution" as a whole, and of finding room within the works constitution for elements which could be contradictory, but if handled rightly are complementary. It is not a case of national or industry-wide bargaining or plant bargaining; as I have already argued, we must have both. It is not a case of voluntary or statutory procedures One may argue about the balance between them, but it is increasingly clear that here too we must have both. It is not a case of representation on the board of directors or through a works council or through shop stewards and plant bargaining, nor of choosing whether to have board representatives from within an enterprise or from outside. As I argued in my study of German company law and co-determination. "Company and Corporation—One Law?", what has made the German systems of works representation so effective is the *multiplicity* and interweaving of the channels of representation used in them, not any one element alone. In the early years of co-determination in Germany it appeared that this was instinctively if not always clearly grasped by rank and file workers, who cut through legalistic distinctions and tended to attach the label *Mitbestimmung* to the network as a whole.

Nor, again, is it a question of loyalty to the enterprise or to the union, whether this be raised from the angle of the firm worried about union intervention or of union officials worried about overweening works conveners. What experience and research indicate is that it is precisely those workers who are longest and most actively concerned with works representation who tend to be outstanding for their loyalty both to the union and to the enterprise. Nor, finally, is it a question of peaceful collaboration or contestation. Collaboration is unlikely to be whole-hearted and confident unless it rests on the foundation of mutually recognised power. But equally, a power struggle and relationship which does not lead into peaceful collaboration to solve mutually interesting problems is sterile and destructive.

It is useful to think of the areas of power-sharing which will need attention over the next few years in two main blocks. One is shop-floor and enterprise participation, including control over "economic" decisions at board and lower levels, and related questions about company objectives, the role of chief executives, and managerial unionism. The other is vertical and horizontal integration: the link between participation at lower and higher levels in an enterprise or between the enterprise's various units: between participation in a holding company, national or multi-national, and its subsidiary enterprises: or between bargaining and other participative arrangements at the level of companies and enterprises on one side and nation-wide arrangements on the other, including bargaining over national incomes policy.

A—Shop floor and enterprise participation: control and the executive Manager

In thinking about future trends in shop floor and enterprise particip
useful to distinguish between a large relatively uncontroversial ar
there are established national customs, a mild convergence between
a steady trickle of evolutionary improvements, and a ring of su
issues which are either unsettled or strongly disputed.

Till a few years ago there was a sharp distinction between the s
representation at this level in Britain and Ireland on the one hand ar
on the other, aggravated on the Anglo-Irish side by a Channel fog
rance. The Anglo-Irish system rested overwhelmingly on collective a
in matters of procedure as well as substance, and on representation
dure as well as substance, and on representation through the union—i
notably through shop stewards, in Ireland still with the accent on t
official—rather than through works councils and similar bodies. The
of such works councils as existed were usually in principle consulta
kept clearly distinct from the exertion of power, the business c
negotiators. There was little interest in Board representation. The char
the Anglo-Irish industrial relations system was overwhelmingly vc
Statutory authority was brought in only to fill gaps, for example to fi
in weakly organised trades, and to promote and encourage rather
regulate. The role of labour tribunals and statutory enquiries was strictl
ed. White-collar workers tended to be unionised in the public sector, b
little in the private sector; in the case of managerial grades, scarcely at
industrial relations systems of the Six differed considerably from one a
for example as regards the basis of trade union organisation, the role
union in the plant or the interest shown in different countries in en
representation at Board level, but tended as a group to differ still mor
these respects from the systems in Britain and Ireland. On both sides
channel there was a growing interest in individual motivation at wo
design of work groups, and generally in human relations at work. But
mand was often alongside and sometimes in competition with offi
presentation through unions and works councils rather than geared in

Today, as I noted earlier, there is a marked convergence all along the li
the side of the Six there is a new accent on the role of the union in the
and more reluctance to let the union disappear from view behind st
works councils and similar machinery. Works councils are not bei
emphasised: rather the contrary. But there has been a move in the di
of two-channel representation such as has been usual in Britain, with a
council and plant-level union negotiating machinery operating side by s
Britain at the same time there has been a move in the opposite direc
growing feeling both in the labour movements and among industrial re
specialists that a single channel is best; or, if it is thought convenient t

two channels, that at least they should be operated by a single body of people, the shop stewards who are the workers' real and effective representatives. On both sides of the Channel an interest is growing in building a link, on lines already developed in Thorsrud's experiments in Norway, between trade union or works council representation and the movement for autonomous working groups.
Britain has been given in the Industrial Relations Act of 1971 a much stiffer legal framework for industrial relations than in the past. It has acquired a set of labour courts, and the Act of 1971 permits, though it does not require, the imposition on firms and industries of statutory negotiating and consultative procedures. There is a new interest on the political Left, not necessarily in Board representation, but certainly in stronger representation of workers at the points at all levels at which key management decisions are taken. There are increasingly strong white-collar unions. The fog of cross-Channel ignorance is rolling back, and not only the trade unions but bodies such as the Institute of Personal Management—notably in its 1971 report on "Workers' Participation in Western Europe"—at least take the trouble to find out what sort of procedures operate beyond the sea.

The degree of convergence should not be exaggerated. The industrial relations systems of the various countries of Europe keep their own characteristics, and, as I have already argued, will continue to do so. Nevertheless convergence between them is going on, and will go further. So too will evolutionary changes in them, such as the growing interest in autonomous work groups or the recent revision in a number of countries of statutory rules about works councils and workers' right to information. In areas like these the problem for the Community's institutions is simply to help evolutionary processes forward, not to impose a direction on them.

Meantime, however, two other areas stand out as centres of controversy where common assumptions have still to be established. One, with which I deal under the next heading, is the relation between shop floor representations plus autonomous work groups—"shop floor power"—and representation at the higher levels of the multi-unit or international enterprise, as well as of the industry, the national economy, or Europe as a whole. The second is the question of control over the general policies and "economic" decisions of directors and managers, whether on the Board or at lower levels, along with related issues about the role of boards, chief executives, and the senior executives immediately below them.

The second issue in the second case is the relation to the executive manager, and especially to the chief executive and entrepreneur, of control by any of the interests involved in a firm, including shareholders. One should not forget the admirable words of the Jenkins Committee on British company law, discussing proposals for shareholder democracy:

"It may be theoretically desirable that shareholders should have a more effective voice in the management of their company's business... As against this no company's affairs can be managed properly, or indeed managed at all, otherwise than through a board of directors with a reasonably free hand to do what they think best in the interests of the company".
(Report of the Company Law Committee, Cmnd. 1749, HMSO 1962, par. 14)
It was far from the Jenkins Committee's intention to deprive shareholders of control over their companies; most of the Committee's report was concerned with increasing it. But in shareholders' own interests the form of their control must be reconciled with the freedom of manoeuvre for directors and executives on which the prosperity of the company and so of its shareholders depends. Not even from the side of shareholders is it tolerable to have committee government or interference with entrepreneurs' and executives' discretion by people not properly in touch with an enterprise's daily life.

Clearly we want such things as executive efficiency, entrepreneurial dynamism, the unified direction of each enterprise, and trade unions independent of management. Most of us, whether liberal or socialist, also want an effective market economy, due attention to profit, and a system of decentralised (not necessarily private) ownership in which the rights and social role of decentralised property are respected. There is by now enough experience to show that there is no need to rely for these things solely on the traditional type of organisation in which control over an enterprise's general, and especially its "economic", policy lies exclusively with private or State capitalists and with managers. There is a genuine argument as to whether the German coal and steel industries have served the consumer, the shareholder, and employees any better under fifty-fifty co-determination than they would have been served without it, but it is only by bending the evidence that it can be argued that they have served them worse. There have been plenty of signs of dynamism and efficiency in Yugoslav communes, and in the Kibbutzim and the trade union controlled enterprises of Histadrut in Israel. I am investigating at the moment cases of effective entrepreneurship in Ireland, and find that among the most striking in recent years, operating in strongly competitive markets and on a scale substantial by the standards of any country, are the meat-packing and dairy enterprises of certain farmers' cooperatives. In all these cases equal or complete control by employees, unions, local communities, or producers' cooperatives has proved compatible with the operation not simply of efficient and dynamic enterprises but of an effective market economy.

It is certainly the case that profit is a central test of business, in the interests of efficient service to consumers and of security, opportunity, and good conditions for employees as well as of dividends and growth for shareholders. It is also the case that if one examines the tests of performance customarily used in, let us say, a Yugoslav commune one finds that profit, in the sense of maximising the cash available to increase members' incomes currently or in the long run, is only one of the objects in view. Others might be the reduction of work

strain and improvement of the working environment, the personal and career development of members and improvement of local employment opportunities, provision of social services and contribution to local amenities and local and regional development, or simply technical and scientific achievement or economic growth as ends in themselves.

But there is no incompatibility between these two findings. On the one hand a commune, or a non-profit enterprise in Western capitalist economies, has still to earn its living in a market. It must at least be able to meet its outside commitments, and so to avoid a loss. If it wants more resources for these other objectives, it has to earn enough surplus to cover them. And on the other hand, though there are groups and individuals within Western capitalist enterprises for whom profit is the main or even the sole objective, they are likely in today's conditions soon to find themselves in trouble even as profit-makers if they forget that an enterprise is a plural society, and that other groups will collaborate only if their objectives are provided for as well; whether these objectives be external, as with pollution and the environment, or internal as with job security and enrichment. I said earlier that my impression as one who works in management education is that, just as behavioural science and quantitative methods were the theme of management education in the last generation, so the social responsibilities of business will be the theme of the next. It is not by accident or out of pure altruism that this is happening. Society is imposing new standards on business, and both management and management education reflect these. The West moves towards social responsibility without abandoning profit and the market, while Eastern Europe moves towards the market and profit without giving up its socialist objectives.

It would be hard today to argue seriously that sharing the ultimate control of an enterprise with employees is incompatible with the rights and use of private and decentralised property. One of the oldest traditions of the private sector itself is the partnership into which one member enters on the basis of his capital and another on that of his work and professional skill. Nor is a share for employees in "economic" control incompatible with an arm's length relationship between a union and management. We now have working formulas showing how the two can be reconciled. This seems for example to have been very successfully achieved under the British Steel Corporation's plan for employee directors at Product Division level. There are formulas for maintaining unity of a firm's directing authority while also incorporating into it, or bringing it under the influence of, employees as well as shareholders. Germany has chosen to combine a representative Supervisory Board with a unified, professional, Executive Board, The Netherlands have preferred a unified, self-coopted, Board of Commissars, but with a right for employees as well as shareholders to propose or veto candidates for cooperation. And there are successful examples from several countries of how to build Board representation in to the whole network of representation of employees by works councils and unions, and to avoid leaving it to hang isolated in the air.

What then is missing—what are we disputing about? It is not that we la
elements of a solution, or rather of solutions geared to the circumstan
each country or industry. It is that, whereas the relationship between
holders and executives has been thought through and worked out in pı
over generations, in the case of employees' share in the final cont
authority of enterprises the necessary constitution-making is only now g
under way. Only one country, Germany, has a really long and subst
tradition in this field. The first concerted, all-European, effort to agree
enterprise constitution incorporating this element has been the debate ov
European company, and even this was confined for the most part to th
The main task facing us in this area over the next few years is not to co
basic research and experiment, nor to debate principles. For the reasons I
already indicated, we can take it for granted that the demand for an eff
share in the final control of enterprises will continue and increase, an
have by this time a pretty good idea of what sort of arrangements for
purpose will be workable. The problem now is to assemble from the elem
already available a constitution to suit each country and, if necessary,
case.

I do not want to minimise the difficulty of this: of doing justice both to
complications of this sort of constitution-making and to the circumstance
different cases and the different interests involved in them. But at least th
now a practical, down to earth, task, and it should be possible now to
away from the barren exchange of unsupported generalisation and coun
generalisation so common in this area in the past. Towards this next stage
practical achievement I contribute half a dozen rapid-fire points.

(i) We can today assume a better understanding than in the past of the r
of an executive and of the conditions necessary for him to fill it. He needs
be more of a politician than in the past, one who has insight into and
reconcile the various interests involved in his enterprise, and can lead throu
participation rather than dictation. He is also more of an employee, one w
needs the support of his own union. In these days of mergers, sharehol
revolts, and sudden redundancy, I would not exclude from this even manag
directors. But he still has and is by now accepted on all sides as having
same two basic characteristics which he always had. He is, first, a member
leader of a management team, not a representative. His appointment may
approved by spokesmen of this or that interest, but that does not make him
representative. The debate over the role of the labour director in the Germ
steel and coal industries has been particularly useful in clarifying this. T
labour director is now accepted by all as primarily an executive whose a
pointment is subject to special formalities, and not primarily as a union ma
Like other executives, he serves the enterprise, not any one interest within
And secondly, and not less important, the executive like other workers continu
to need a sphere of individual autonomy, limited neither by unnecessary rul
and directions nor by committee government.

(ii) The idea of a Supervisory Board is essential to the right relationship between executives and employee or other representatives. If these representatives are to have effective control they must be able to keep fully informed, to call in key decisions for their consideration, and if necessary to act to remove an executive, but they must not have the right to impose committee government on him or take away his necessary autonomy. But the actual mechanism for applying this idea does not have to be a Supervisory Board, even at the top level of an enterprise. It can be a negotiating committee with the union, a staff board, or a works committee, provided that whichever of these is used has appropriate and strong enough powers. The structure and function of boards varies from one country and enterprise to another, and so may the actual machinery for participating at board as at other levels.

(iii) The British trade union movement rightly insists that employee control over executives' actions and "economic" policies is not only, or even perhaps primarily, required at the top. A good example of what they have in mind is the British Steel Corporation's introduction of employee directors at Product Division level. Looking in one direction, there is a case for applying the idea of a supervisory board or of employee directors of the British Steel Corporation type down to the level of the individual plant or even department. But, equally, when one looks not downward but upward in any enterprise, experience shows that there is no level at which employee representation ceases to be relevant. It is hard to take seriously the objection of the Union of Industries of the European Community to the introduction of a works council at holding company level in the European Company, on the ground that it is "inconceivable" that such a council could carry out "important and reasonable" tasks on behalf of workers in the group of companies controlled. It is precisely the major decisions about the deployment of resources, the trading relation between subsidiaries, and the criteria of management success which are made at this level which are likely to have the most far-reaching effects for workers in the subsidiaries and countries which they affect. There is no escaping the fact that the top level of a company is not only the place where many key decisions are made but the final court of appeal in the case of decisions lower down.

(iv) I cannot repeat too often that employee representation at any level, and with whatever degree of control or influence, must always be thought of, not in isolation, but as part of a total network of representation using various channels; union machinery, board representation, works councils, or whatever they may be. Board representation does not cease to be relevant merely because it is inevitably remote from the ordinary worker. It is a powerful supplement to other forms of representation, but has its full usefulness only if effective transmission belts link it to other lines of representation both at its own level—through the union—and lower down. As the Biedenkopf Commission rightly recognised for Germany, there is everything to be said for including in the team which represents employees at board level both representatives from

an enterprise's own staff, fully informed of its conditions, and others from outside with a wider viewpoint and an independent power base.

[illegible] Recognition that an enterprise involves more than one interest, and that interests other than those of shareholders have a right to a voice in its affairs, has of course implications for the information which the enterprise needs to make available to the representatives of each interest and to the public. A number of these implications are already written into different countries' companies acts and works constitution laws or, in Britain, the Industrial Relations Act of 1971. But I draw attention again to a further implication which I mentioned earlier: the case for moving from profit-and-loss to net value added accounting, so allowing the financial claims of all the parties to an enterprise, including the community as well as employees, to be treated on an equal footing.

[illegible] Distinctions in the machinery for sharing in control over general management and economic decisions will clearly be needed according to the size, stage of development, and type of market of enterprises: the distinction between public and private ownership is for this purpose less important. The case for separate measures for giant concerns has been particularly thoroughly debated in Germany. I emphasise rather the other end: the case for a measure of employee control even in owner-managed firms. I am watching at the moment, from the angle of an old customer, the crumbling of a family firm where the current successor, through no fault of his own, has proved to be an effective second in command but not fitted for the top job. This could be a case for Bloch-Laine's *magistrature économique et sociale*[7] to step in and withdraw the successor's "licence to direct". But it is also worth reflecting that the origin of the German supervisory board was the need, in *Kommandit* companies, to give the active shareholders their head, yet at the same time to provide a watchdog on behalf of the passive shareholders who normally have no hand in directing the business. There is a case for a similar arrangement in small companies today. Normally the "master craftsman" who is likely to head such a company should be left the same full freedom to act as an active shareholder under *Kommandit*. But employees as well as other shareholders need also the right not only to be informed but in the last resort to intervene before it is too late.

E—The vertical and horizontal integration of participation

Decisions of importance and interest to employees are made at every level of the economy and at every level and in every part of an enterprise, and many of these decisions are or should be systematically related to each other. Therefore the network of participation, whether in the form of bargaining, consulta-

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[7] F. Bloch-Laine, *Pour Une Reforme de l'Entreprise*. Seuil. 1963, Chs. III and VII.

tion, or direct membership of controlling bodies must cover them all, and in an integrated way. That is the principle, and it is no more than obvious common sense. The problem is to apply it. I distinguish again between aspects which may need hard work and tough bargaining, but are matters of straightforward evolution from past experience, and one major aspect which calls for decisions of a sort not yet generally accepted.
In the first category I include all aspects of integrating systems of participation within the enterprise; the integration of autonomous work groups with shop steward and other representative systems, the link between shop floor and plant-wide or company- and group-wide representation, including representation at the top level of holding and multi-national companies, and the linking and balancing of the representation of units at the same level of each enterprise. None of these is easy, whether in a capitalist or a socialist economy. There is room for strong disagreement about methods. There is a good deal of innovation going on, and considerable shifts of emphasis; towards shop floor power and company-wide bargaining, away from the more generalised type of bargaining found at industry-wide or regional level. But none of these aspects of integration raises any principle outside and beyond the established practice of collective bargaining and other forms of representation, and for all of them we have at least some models to work from. The problem is to extend and develop existing practice rather than to break away into something wholly new.

When for example I read a paper by Mr. Charles Levinson of the International Federation of Chemical and General Workers' Unions on bargaining and participation in the multi-national corporation, or follow other work of the International Trade Secretariats or the ECFTU, or the debate on representation in the European Company, I recognise, certainly, that here is an under-developed area of participation in which much work remains to be done. As the British Trades Union Congress noted in its 1970 report on International Companies:

"As yet . . . international trade union coordination could not be said to amount to a major countervailing force to the multi-national corporation."

and, as regards:

"Presentation of internationally agreed bargaining demands to international companies as a whole, and coordination of tactics to realise these demands . . . In the world as currently organised this . . . is a very long way off."

There is a mass of work still to be done by unions and employers. International institutions, in particular the institutions of the European Community, have still to build a code of good practice for industrial relations at the multi-national level which will stand comparison with those now taken for granted in individual countries. Some of the provisions of such a code might with advantage be taken from the field of company rather than labour law. There

could for instance be an interesting lesson for trade unionists in the provisions of the German Companies Act of 1965 which require a holding company either to give shareholders in a controlled company legally binding guarantees against discrimination, or to report annually on its transactions with the controlled company, particularly those not conducted at arm's length. The right to guarantees and information of this kind is precisely the sort of safeguard which employees in a multi-unit and especially a multi-national company need.

But in all this we remain on familiar ground. Bargaining along with other forms of participation in the multi-national corporation belongs basically to the same world as bargaining and participation in multi-unit companies of similar size within one country, and there is already a good deal of experiment with it from which to learn. So also at the other end of the scale, though few enterprises would yet claim to have solved successfully the problem of integrating autonomous work groups with traditional trade union representation, it is clear that there need be no basic contradiction between the two, and there are at least some models on which to draw.

Where a different and much tougher problem arises is over reconciling the claims of enterprises with the needs of the economy and community as a whole, particularly over incomes policy. In disputes over pay in a firm or industry, top-level and shop floor level union negotiators may have their differences. But they are heading in the same direction, towards the maximum settlement obtainable for their members, and the question is simply of what tactics to employ. When on the other hand it comes to incomes policy, union negotiators at national or industry-wide level may and regularly do find themselves expected, for the sake of maximising real income and employment prospects in the longer run, to ask their officials and members at enterprise level to forgo short-term gains which employers would be willing to grant. Incomes policy or no incomes policy, many employers—as a number of them made clear at the National Institute of Economic and Social Research's conference on British incomes policy in January 1972—will not of their own accord risk shutting down their firms to resist inflationary claims which their own particular market conditions would let them meet. For both unions and employers, especially at enterprise level, incomes policy stands in direct contradiction to key assumptions of ordinary collective bargaining.

An incomes policy is several things at once. It is first and foremost a prices policy. Its primary aim is to defeat inflation by holding down the components of prices, but this may need to be supplemented with more direct control over prices themselves. It needs to take account of all the types of income which enter into prices and of the special problems of particular groups of income receivers. Though for example the chief cause of incomes inflation is usually wage and salary claims rather than profits, in practice an incomes policy has no need of continuing success unless profit levels, dividends, and now also the level and ownership of reinvested profits are regulated as well as wages. In-

comes policies have arisen particularly out of concern with the overall, average, increase of incomes, but cannot escape being judged on whether they do or do not help the low-paid or favour the rich. Except in a time of extreme national crisis, they can hope to succeed only if associated with an overall climate and policy for social progress. In the past I would have said "for growth"; but, for the reasons I have already given, that particular lubricant is likely to be less available in the future than in the past, at least in so far as it refers to enabling people in industrialised countries to consume more physical resources. An incomes policy has to be all-embracing, differentiated, and detailed enough to take account of a great variety of circumstances in particular occupations and groups. It has to be felt effectively at all the levels, right down to the individual enterprise and the shop floor, at which significant decisions about incomes are made. Yet at the same time it has to be simple, easily understood, and seen to be based on clear and generally acceptable principles.

A policy as many-sided as this must depend heavily on the support of employers and workers, for only the people in each enterprise and occupation have the knowledge needed to apply the necessarily broad and simple principles of an incomes policy flexible enough and with enough attention to local circumstances. But an incomes policy cannot be left to employers and workers or their unions alone, for it too often clashes with particular employers' or workers' interests. It is concerned by definition with balancing claims against the resources of the community as a whole, and employers and unions, even collectively, let alone individually, have neither the motivation nor the breadth of vision to do this. The Government has therefore to appear on the scene, not as a detailed regulator, but as a third bargainer and to use its power, on behalf of the community, to insist that unions and employers shall play their detailed part in incomes policy in spite of their reluctance

This is the essential point which has emerged from the experience of incomes policies in a number of countries: that the Government's relation to the other parties to incomes policy must be both a limited and a bargaining one. It cannot be one merely of persuasion, nor of detailed and continuing compulsion. Persuasion is too weak. Detailed and continuing compulsion can be and has been made to work under the Stalinist type of socialism. In a market economy and a democracy it is simply not acceptable, except in short periods of extreme crisis. There remains only the possibility of a relationship in which the Government bargains with the other parties, on the same basis as in any other sort of collective bargaining, for their cooperation in carrying out policies which the Government ought not normally to carry out in detail itself. What the Government wants is the agreement of employers and unions, at all the levels at which significant decisions about incomes are made, first to define and accept a set of broad and clear principles about incomes policy, and secondly to administer the agreed policy in detail, with a minimum of direct intervention on the Government's own part. What it has to do to get this agreement is to convince the other parties—again at all levels—that the

Government has enough favours to grant and penalties to threaten to make it worth while for them to reach this agreement.

A particularly effective type of argument is likely to be for the Government to convince the other parties that in the last resort it can and will itself enforce a policy, though crudely and on lines which employers and unions would prefer to avoid by handling the policy: the more objectionable, in a sense, the better. Ordinary collective bargaining depends on the availability of a strike or a lockout as the ultimate deterrent; it is to the advantage of all parties that this deterrent be not used, or at least not used too often but it must be there. The Government too needs for the purposes of incomes policy bargaining to equip itself with a set of strong bargaining counters.

Governments can if they wish mobilise a whole armoury of inducements and deterrents. The impact of some is general, at the national level. At the end of 1970 the Irish Government broke a deadlock between employers and unions, and made possible a highly successful National Employer-Labour Conference Agreement against inflation, by bringing in a Prices and Incomes Bill on lines highly unwelcome to both sides, showing that it meant business with it, and then withdrawing the bill when the deadlock broke and agreement was reached. A wage freeze is another very useful threat. There can also be bargaining over a Government's own fiscal and social policies.

But more detailed means of persuasion are also necessary, for the practical problem of incomes policy is less to get a national agreement on broad principles than to stop individual industries and enterprises from breaking away from it. My own favourite scheme is a heavy tax on the wage bill, payable partly by employers and partly by workers, with exemption or repayment for enterprises which can satisfy an appropriate employer-union body, or in the last resort the Government itself, that they have kept within incomes policy norms. It is of the essence of the plan that the onus of proof should be, not on some outside body to prove that an enterprise has violated the norms, but on the enterprise to satisfy the guardians of incomes policy that it has kept to them. But there are many other weapons available, some fiscal, some of other kinds. Overpayments can be disallowed for corporation tax, prices or incentive earnings can be limited by order, subsidies and tariffs can disappear, governments decisions and services from government departments can be unaccountably delayed, government contracts can suddenly go elsewhere. A government which is determined to use its bargaining power will find that it has no lack of cards in its hand, provided that it organises itself to use them and learns to play that game. There is admirable sense in the doctrine—his methods were less attractive—of a French Prime Minister of seventy years ago: the Republic owes justice to all, but favours only to its friends.

I said earlier that it is hard to conceive how a European fiscal and monetary union could work without a network of incomes policies covering all the Ten. It

is a matter for consideration, not only how the European institutions can best help to bring these policies to birth in individual countries, but what use they can make of their own considerable and growing bargaining power to help this process along, particularly by intervening in decisions relevant to incomes policy which may be made at European level either through employer-union bargaining or directly by managements.

III—CONCLUSION: TASKS FOR THE EUROPEAN INSTITUTIONS

The field dealt with in this report is one where action, even if coordinated or harmonised, will remain largely at the enterprise or at most the national level. The role of European institutions, public or private—of UNICE or the trade union bodies at European level as well as of the Commission—will therefore be largely, as I said earlier that of the gardener who helps a hundred flowers to bloom, each in its own style and place. This role ought not to be underestimated. Some of us late-comers to Europe may be better placed to appreciate this than long-established members of the Six. In the British Isles we have *experienced lately a remarkable impression of fresh stimulation and of windows* opening, simply from having actually to talk to our neighbours and take seriously their strange and peculiar ways of solving problems similar to our own. But I have of course also mentioned a range of issues, such as European-level collective bargaining or even incomes policy, in which the Commission or the European organisations of trade unions or employers need to be involved by way of their own direct action.

THE CONDITIONS FOR AN INCREASE OF THE INVESTMENTS OF COMMUNITY ENTERPRISES IN THE LESS DEVELOPED REGIONS OF THE COMMUNITY

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THE CONDITONS FOR AN INCREASE OF THE INVESTMENTS OF COMMUNITY ENTERPRISES IN THE LESS DEVELOPED REGIONS OF THE COMMUNITY

D. J. EZRA

Introduction

Article 2 of the Treaty of Rome emphasises the aim of achieving a balanced economic development within the European Community. Regional problems existed, and have continued, precisely because economic development tends naturally not to be evenly balanced. There is a strong case for special measures to be taken to correct these regional imbalances, both for economic and social reasons. Hitherto the special measures have been taken by the countries concerned on an individual basis. The question now posed is the extent to which there can be Community policies, in addition to national policies, to encourage investment in these regions by both the public and private sectors.

In just a few months time, the Community is to be enlarged by the accession of Britain, Ireland, Norway and Denmark. This conference on industry and society therefore provides an opportune moment to examine regional developments and the direction of regional policy in the context of a wider Europe. Britain has a long experience of regional disparities and of operating policies designed to even out these imbalances. I am convinced that community enlargement will strengthen the resolve of European nations to arrive at a fully effective set of regional policies by drawing on the resources and experience of ten member countries.

I am particularly glad to be able to present this paper to you. My own industry —coal—has for many years been in the "front line" of regional discussions, both in Britain and the Six. Unfortunately, this has generally been because coal has been contracting and concentrating on the most efficient coalfields: collieries have been closed, men have become displaced, thus creating serious regional problems of underemployment. This process has, however, contributed to a keen awareness within the coal industry of the problems in the regions and a deeply-felt concern to find real and lasting solutions.

Europe's regional problems

Regional problems have arisen because of uneven rates of economic development and the continuing process of structural change. Typically this is as-

(*) Original Text

sociated with the attraction of industry towards the major conurbations on the one hand; and the decline of traditional industries and the move of workers away from the land in underdeveloped agricultural regions on the other hand.

The symptoms of regional imbalance are seen in the gap between the growth rates in the more prosperous parts of a country and the "declining" areas. This is accompanied by wide differences in the levels of average wealth per head and in standards of living, and by relatively high levels of unemployment and emigration of population in the poorer regions.

I would like first to examine Europe's regional problems, country-by-country, starting with the UK.

(a) *United Kingdom*

Regional problems in Britain are associated primarily with the need to adapt and rationalise traditional industries, and to this extent, they are rather different in nature from the regional problems found in most countries on the mainland of Western Europe. To find the explanation for this we have to look back to the days of the industrial revolution: "being the first nation to industrialise, it paid Britain to buy her primary products overseas, especially in Commonwealth countries, and to specialise in the production of industrial exports, in which, initially at least, she had no competition".[1] In the late 18th century and throughout the 19th century there was a rapid build-up in industrialisation in Britain, and a corresponding reduction in agricultural employment. "British prosperity was thus built on exports of textiles, iron and steel, ships and coal and her agricultural population had fallen to a very low percentage of the total labour force even by 1930". Today less than 3% of the British labour force is engaged in agriculture, and this is the lowest figure in the world.

The regional problems emerged with Britain's decline from supremacy in industrial trade in the years after the first World War. "The over-valuation of the £ in the 1920's, the emergence of economic blocs in the '30's, changes in technology and competition from lower wage countries, all combined to produce a secular decline in the traditional export industries. When the cyclical effects of the great depression were added to these long-run trends, the result was acute economic distress and unemployment in the areas where these industries were concentrated".[1] Although these difficulties were alleviated by the demands placed on the traditional industries during the second World War and in the years immediately following, they re-emerged with full force in the later 1950's.

The areas that have been most seriously affected by this decline are those in which the traditional industries were most heavily concentrated—Northern

1 Gavin McCrone in *Regional Policy in Britain.*

Ireland, Central Scotland, South Wales and the coastal regions of Northumberland, Durham and Cumberland. The statistics in Table A clearly identify these regions as the main "problem areas" in the UK. Unemployment in the North and Scotland is more than three times as severe as in the South East of England; in Wales it is 2½ times as severe; and in Northern Ireland it is almost 4½ times the South Eastern rate. They are also regions of generally low population density and slow growth in total population—indeed in Scotland there has been virtually no growth in population over the years 1961 to 1969. A substantial migration of population away from these regions has, for many years, off-set a large part of the natural population increase.

Average personal income is below the national average in all the development areas, but the difference is significant only in Northern Ireland, where income per head is 84% of the national average. The problem of concentrated poverty in declining regions is, therefore, far less severe in the UK than it is in many other European countries (where agriculture remains the primary occupation in many regions).

In parallel with the decline of Britain's traditional industrial regions, there has been a growing concentration of newer industries in the Midlands and, particularly, South East England. This has produced a second major regional problem in the UK—congestion. The South East of England occupies only 11% of the total land area, but contains 31% of the total population. The Greater London Council area alone contains 7¾ million people (1969 figure) and the outer metropolitan area a further 5¼ million. A total of 13 million people is therefore crowed into a very small corner of the UK, making this by far the largest urban concentration in Western Europe.

Britain's regional problem is, therefore, two-fold. It clearly entails "raising the rates of growth in the less prosperous regions, so that their labour reserves can be more fully utilised, migration reduced, and the income gap between them and other regions closed. In the congested regions, the primary problem is to plan expansion in such a way as to make the best use of space, minimise the social and economic costs of congestion and preserve the amenity of the environment. This means that some urban concentrations, such as Greater London, must be prevented from further population growth and expansion must be diverted to other centres".[2]

Britain does not suffer the problem of large under-developed rural areas, which is so widespread on the mainland of Europe. We do have examples of such areas in the Scottish Highlands and mid-Wales, but the population involved is so tiny that though they constitute a serious local problem, they cannot be regarded as major problem areas in a national context.

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[2] Gavin McCrone: Op. Cit.

France

Regional problems in France are more varied than they are in Britain. First, as in Britain, there is the problem of areas which had become heavily dependent upon traditional industries which are now in the process of adaptation. The industrial revolution in France was centred on the coalfield areas to the north and east of Paris—Nord, Pas-de-Calais and Lorraine. The run-down in coal, and in the textile industry which grew up in the same areas, has brought serious social problems in its wake. Although the coal industry has played a less significant role in the French economy than in either Belgium or Germany, these problems are considered to be more severe than in those two countries largely because the manpower in the French coal industry was drawn almost entirely from the local population whereas the Belgian and German industries employ a considerable proportion of immigrant labour.[2]

Second, there are very large areas in France which remain very heavily dependent upon agriculture—often in small and, by present day standards, relatively inefficient farm units. The whole of the Western and South Western Regions, which together account for 55% of total land area, contain only one quarter of the country's population. These regions are suffering the effects of modernisation of farming techniques: substantial displacement of agriculture workers; large scale migration of population towards the more prosperous regions; remoteness from the main transportation networks (particularly in Brittany, Corsica and the South West) and, in many cases, an underdeveloped industrial infrastructure. In Brittany, there is the added difficulty of the cultural differences between the Breton people and the remainder of the French nation.

Further, there is the problem of severe overcrowding and congestion in the Paris region. This occupies about 2% of the total land area, but contains 19% of the total French population. The excessive concentration of population and wealth in Paris is probably the most serious aspect of regional disequilibrium in France. The statistics in Table 3 clearly highlight the regional disparities in France. Compared with the national population increase of 11% between 1958 and 1968, Paris grew by 17%, while the West and South Western Regions showed an increase of only 5 to 7%. This indicates the magnitude of the net migration of population towards the capital. Population density is 780 per square kilometre in Paris, only one-tenth of this figure in the Mediterranean and Western Regions, and lower still in the South West. Nationally, 15% of total employment is in agriculture—it should be noted that this is more than eight times the figure for the UK. In the South West and Western Regions, more than 25% of the total work force is engaged in agriculture.

There is also a very wide disparity between regions in average wealth per head. The highest figure is naturally found in the Paris area where average wealth is

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2 See *Regional Policy in Britain and the Six*, PEP-Chatham House, 1970.

30% above the national mean. The poorest regions are in the West and South West, with average income in some areas barely half the Paris level: Brittany 72% of the national mean, Midi-Pyrenées 74%, and Poitou Charentes 75%.

The solution to France's grave regional problems requires a firm control of further expansion in the Paris region, the introduction of industries into the declining industrial areas of the North and East, and development of a new industrial base in the agricultural areas of the South and West.

(c) *Germany*

In contrast to the position in many other European countries, regional problems in West Germany are relatively modest. The rapid economic growth of the last 15 years has done a great deal to minimise the regional disparities which existed in the period following the war. Nevertheless, some problem areas do remain:

First the division of Germany meant that some border zones were cut off from their natural hinterland by the frontier, leaving them remote from the centre of economic development in the Federal Republic. The problems in these regions were heightened by the large inflow of refugees from East Germany.

Second, there are certain predominantly agricultural regions in which industrial structure is generally weak, and farming is often relatively inefficient and unprofitable—Rhineland-Palatinate, Bavaria, Lower Saxony and Schleswig-Holstein.

Third, there are industrial areas which are heavily dependent upon traditional industries, notably the Ruhr and the Saar coalfields. While there have been difficulties in these regions, the successful stabilisation of German coal output in recent years has for the time being effectively solved the problem.

Finally, West Berlin presents very special problems because of its total isolation from the rest of the country.

Despite the existence of these problems, the statistics in Table C confirm a reasonably homogenous economic development throughout the Federal Republic. There are no excesses of unemployment. There are few areas which have suffered heavy population emigration. And while there is a fairly wide spread in average wealth per head between the richest and poorest areas, the sub regions with the lowest wealth per head are generally those with the smallest populations.

In general, "the Federal Republic provides a clear instance of the argument

that high and increasing national prosperity is the best remedy for regional troubles."[4]

(d) *Italy*

Italy's regional problems are undoubtedly the most serious in Western Europe. The contrast between the industrialised regions in the North and the underdeveloped South—the Mezzogiorno—is so marked that they could almost be considered as two separate countries. The Mezzogiorno covers some 40% of total land area and contains 36% of the total Italian population. Its economic development has been retarded by geographical, physical, climatic and historical factors.

The Mezzogiorno is characterised by poverty, remoteness and an inadequate industrial infrastructure. The contrast between this region and the Northern part of the country is highlighted by the statistics in Table D. More than 40% of the total work-force is engaged on the land in the Southern regions of Abruzzi, Molise, Apulia, Basilicata and Calabria, compared with only 7% in the industrial region of Lombardy. In Sicily and Sardinia agriculture accounts for more than 20% of total employment. Unemployment is high throughout the Southern part of Italy—generally between two and three times as severe as in the Lombardy region. It is, however, the enormous disparity in wealth between the North and the South which is the most distressing feature of Italy's regional problems. Nowhere in the Mezzogiorno is average wealth per head higher than two-thirds of the national average. In Basilicata it is only 57% of the average, in Molise only 54%, and in Calabria it is as low as 49%. These three regions alone contain three million people. In the industrial regions of the North average per capita wealth is considerably in excess of the national average—in Lombardy by as much as 50%. Average wealth in Lombardy is precisely three times that for Calabria.

These immense differences in income, and the lack of employment opportunity in the South, have stimulated a massive migration of population away from the Mezzogiorno towards the industrial North. Between 1951 and 1962 this population loss was estimated at 1.7 million people, and it has continued on a large scale right up to the present time. In the year 1968 alone 150 000 people moved away from the Southern regions. "This exodus deprives the South of valuable and enterprising manpower whose absence might be a major handicap in subsequent growth phases."[5]

Outside the Mezzogiorno the agricultural areas of Central and North Eastern Italy have a relatively low level of per capita wealth in relation to the industrialised regions of Lombardy and the North West, and have suffered from

4 *Regional Policy in Britain and the Six*, OP. CIT.
5 *A Regional Policy for the Community*, Commission of the European Communities, 1969.

migration of population. But these problems are relatively insignificant when set alongside those of the Mezzogiorno.

In parallel with the problem of the depressed regions of Italy, there is considerable congestion in the industrial regions of the North, particularly in the principal cities.

(e) *Belgium and the Netherlands*

Belgium and Holland are both relatively small, compact nations, and their economic development has tended to be reasonably homogenous. Regional disparities are not marked, and the statistics in Table E show that there is only a narrow spread in income levels between regions in the two countries.

Holland's main problem is one of congestion. It is the most densely populated industrialised nation in the world (an average of 349 people per square kilometre in 1968), and there is a heavy concentration into the Western region. This occupies only one-fifth of the total land area but contains almost half the the Dutch population.

The agricultural provinces in North Holland have income levels below the national average, and suffer some migration of population towards the more industrialised areas. Holland does therefore share the problem of relatively underdeveloped agricultural areas, but these difficulties are fairly modest when considered on a European scale.

Regional problems in Belgium are generally more serious than in Holland, and stem from the changing pattern of industrial development. As is the case with Britain, Belgian industrial prosperity was based very much on the heavier industries associated with coal. There was therefore a concentration of population on the principal coalfields in the Southern part of the country. There has been a very sharp decline in Belgian coal production over the last 15 years from 30 million tons per annum in the middle 1950's to 11½ million tons in 1970. Belgium's Southern coalfield areas have therefore been in decline, and the country's main growth centre has shifted towards the Brussels and Antwerp areas. Unemployment has grown in the South and there has been some migration towards other parts of the country. The problem of the declining coalfield areas is compounded by the fact that they are situated in the French speaking Walloon region, whereas the new growth areas on the cost are Flemish speaking. The political and linguistic barriers between these two halves of the country make it difficult for workers displaced in the South to be fully integrated into the community in the North. The main regional priority in Belgium is, therefore, to attract new industry such as engineering, electronics and consumer goods into the Walloon heavy industrial area.

The theory of regional aid

We have seen the wide range of regional problems that exist in today. The position of Southern and Western France and, Mezzogiorno is undoubtedly the most acute. Indeed, writin American Economist Herbert Luethy said "one half of Fran excluded from the modern economy and makes no appeara temporary market either as a producer or consumer."[6] Rat though still complex, are the problems of the declining indus the UK, and the special difficulties of Northern Ireland.

Having surveyed the scene, we should now examine how the p approach the question of regional disparities.

The population in depressed regions clearly suffer considerabl distress. In many countries the people in these regions are ve than those in the more prosperous parts of their country, u high and the opportunities for employment are fairly limited. In regions which were the centre of 19th century industrialisati traditional industries are now in a process of major adjustmen characterised by a poor and ageing social capital. Housing cond bad; hospitals, schools and road networks are often not up standards; and the regions are often scarred by large scale in tion left in the wake of once prosperous industries. These factors to produce a most unattractive environment, which tends to establishment of new industries in these regions.

Gunnar Myrdal has shown that "if things were left to market for ed by any policy interferences, industrial production, commerc surance, shipping and, indeed, almost all those economic activi developing economy tend to give a bigger than average return- tion, science, art, literature, education and higher culture ge cluster in certain localities and regions, leaving the rest of the co less in a backwater."[7] Once a region has entered the decline ph the more prosperous parts of the country will naturally tend to away from the depressed region, thus encouraging a continuin to themselves, these regions are likely to become poorer in relat of the country. Their social problems will intensify, unemployme and migration towards more prosperous areas will lead to grad tion.

To stabilise this situation, Government intervention is necessary economic balance between the depressed regions and other parts

6 Herbert Luethy, *France against Herself*, New York 1957.
7 Gunnar Myrdal, *Economic Theory and Underdeveloped Regions.*

There are two overwhelming justifications for this intervention—one social and one economic. First, by promoting economic development in depressed regions, Governments are actively seeking to raise standards of living and employment opportunities towards the level of the main growth regions. Second, if a region is permitted to remain in a depressed state, its labour resources will be substantially under-employed. If these can be brought into production, they will raise the national rate of economic growth, and so lead to a general increase in wealth.

The basic dilemma is whether the best and most effective policy is to encourage the establishment of new industries in depressed regions or to encourage people in the regions to move to other parts of the country where there are better employment opportunities—whether to take work to the workers or to take workers to the work.

It is clear that there will be some localised areas with an unusually poor and inefficient industrial infrastructure and, therefore, very little prospect of revitalisation through new industrial developments. In such cases, an attempt to reinvigorate the area might well meet with failure, and would probably represent a misallocation of resources. It would be better to stimulate a movement of the population into an area where development is more attractive, preferably within the same depressed region.

But such "hopeless" cases will be rare. As a general rule, there can be no doubt that the best solution to regional difficulties is to encourage new industries to establish themselves in areas where unemployment is high, standards of living are low, and traditional industries are declining. If the alternate course is adopted and workers are encouraged to move long distances to growth regions in other parts of the country—or, indeed, the continent—it is certain that the first to move will be those whom industry would regard as the most employable. These will be the most skilled workers, the best educated and the young. The older and the less skilled are likely to be left behind. This pattern of migration, by denuding the region of its best labour resources, will reinforce the process of decline, making the region less and less attractive for new development. The result will be an increase in the level of unemployment and a further reduction in wealth and standards of living amongst the people who remain. This is no solution for regional problems; new sources of wealth must be brought in to rejuvenate a depressed region.

Moreover, if there is substantial migration away from a declining region, this is likely to contribute to increasing congestion in the more prosperous areas which tend already to be overcrowded.

As we have seen, the problems of congestion on the one hand and of depressed and underdeveloped areas on the other, are two aspects of one problem—an uneven rate of economic development.

A regional policy will only be effective in evening out rates of growth across a country if it tackles the two aspects of this problem by fostering the develop-ment of depressed regions and actively combatting congestion.

It is, however, easy to understand why firms tend to be attracted to areas where the concentration of industry is already high. These prosperous regions will be the principal market centres for the firms' products, and there is often an advantage in locating close to main markets in order to minimise transport costs especially as industrial development is moving away from the heavier traditional industries. As industry concentrates in a growth area it generates a large pool of skilled labour and stimulates the growth of service facilities. These will then act as a magnet, with new industries being drawn in to take advantage of the favourable industrial environment.

There is also a large element of inertia in industrial location decisions. Once a firm is established in one growth area, there is a tendency for it to expand i the same area and not move elsewhere. As a recent EFTA report stated, "Man firms are located in particular places for purely historical reasons and expan there because, at least in the short term, it seems convenient to do so."[8]

It must be recognised that economies of scale apply to urban industrial develop ments just as they apply to the operations of an individual firm. A certai minimum size must be attained before it is economic to provide many of th services essential to modern industry—railways and a comprehensive roa network; adequate and efficient schools and hospitals; and cultural and oth leisure facilities. However, once an urban area exceeds a certain size, conge tion sets in and diseconomies of scale begin to operate. The provision of soci capital and industrial infrastructure becomes increasingly expensive because mounting land prices and the physical difficulty of inserting these faciliti into an overcrowded environment. There are also very real social costs associa ed with congestion—pollution, lack of amenity and the high costs and lengt delays of transportation (particularly road transport).

There have been a number of studies which have attempted to quantify t ideal size for industrial cities. There seems to be general agreement that t optimum lies somewhere in the population range 150 000 to 500 000.[8] Wh ever this figure may be for individual conurbations, it is clear that industr expansion above this level will lead to heavy congestion and high social costs and ought therefore to be discouraged. To quote again from the EFTA repo "What may be a sound location decision for the individual industrialist, wh seen against the totality of location decisions taken by all individual ind trialists, may not be so for society as a whole."[9]

8 EFTA, *Regional Policy in EFTA – Industrial Mobility*, 1971.

9 See Colin Clark in *Econometrica*, 1945;
K.S. Lomax in *Journal of the Royal Statistical Society*, 1943;
G.M. Nevtze, *Economic Policy and the Size of Cities*.

The control of congestion is therefore an essential feature of regional policy. It should, however, be added that individual regions cannot necessarily be regarded as totally congested or uncongested. To take an example from Britain, the most crowded regions are the South-East and West Midlands, but the congestion is largely concentrated in the Greater London and Greater Birmingham areas. Other parts of the same regions are relatively free from congestion. Conversely, despite the generally low population density and declining industries of Scotland and Northern England, the cities of Glasgow and Newcastle are heavily congested. In stimulating the economic development of depressed regions, care must be taken not to reinforce the problems of overcrowding in their principal cities.

To sum up this section on the role of regional policy I would like to quote from the Commission's Memorandum on Regional Policy in the Community:

"The objective of procuring productive employment for the working population of all regions is an economic and social necessity. It is only by ensuring that all regions enjoy the fullest possible employment that sustained economic growth can be guaranteed ...

"Regional policy should enable the people to assist in their own development by eliminating the causes of economic inertia— by extending educational and vocational training facilities, by increasing their participation in the decision-making process, and by mobilizing and utilizing financial resources at regional level to a degree that will ensure the consistency of decisions at a general level."

We should now proceed to consider the instruments of regional policy employed in the Community and the UK, and their effectiveness in dealing with regional problems.

The instruments of regional policy

(a) *United Kingdom*

Shortly after the Second World War, regional policies in the United Kingdom crystallized into the basic structure they have retained to the present day—control of industrial development in congested regions, and financial incentives to expansion in assisted areas. This system is often referred to as that of the "stick and the carrot". Over the years, there have been many changes in the precise policy measures employed but the dual emphasis on controls and incentives has remained throughout. The measures currently in force are as follows:

The Government is able to control the pattern of regional development through

Industrial Development Certificates (IDC) and Office Development Permits (ODP). In the South East and the Midlands, all office development requires an ODP and all factory development in excess of 5 000 sq.ft. requires an IDC. In other parts of the country, ODPs are not required, and IDCs are needed only for factory developments in excess of 10 000 sq.ft. Permits for large scale factory expansion in the South East and the Midlands are not readily granted at times of high unemployment in the assisted areas, and this has been an important factor in directing firms towards the assisted areas.

There are three types of assisted regions in Great Britain—Intermediate Areas, Development Areas, and Special Development Areas. All receive financial incentives for industrial development at varying levels, depending on the severity of the regional problem. There are general incentives for industrial investment in all parts of the country, and it is against these that the effectiveness of the special regional incentives should be judged. Capital expenditure on industrial buildings outside the assisted areas qualifies for an initial allowance against tax of 30% (this is to be reduced to 15% from April 1972). Expenditure on plant qualifies for an initial tax allowance of 80% plus 25% of the reducing balance in later years (from August 1973 this will be reduced to an initial allowance of 60% plus 25% of the balance in later years).

The Intermediate Areas represent a new category of assisted region, established in 1970 following the recommendations of the Hunt Committee. They are areas which, though they do not suffer heavy unemployment and the problems of declining industries to any significant extent, have not shared in the prosperity of the main growth centres of the British economy. Their problems are intermediate between those of the depressed regions and the congested regions, but some special measures were considered necessary to encourage the growth and proper distribution of industry. The main areas in this classification are Humberside, the Yorkshire Coalfield, small parts of the East Midlands and North East Lancashire, the South Wales coastal strip and South West Devon. The first year tax allowance on plant is 80% as in the non-assisted areas, but the initial tax allowance on buildings is increased to 40%. In addition, all industrial projects in the intermediate areas—whether new projects or extensions to existing premises—qualify for a 25% grant towards the cost of building. In the case of firms moving into the area for the first time this grant is raised to 35% as an added incentive.

The Development Areas are the regions of generally high unemployment which are suffering from a decline of traditional industry. They include almost the whole of Scotland, the North of England, Wales, and parts of South West England which are remote from the main stream of economic development. In these areas, the first year tax allowance on fixed plant is 100% and the initial allowance on buildings 40%. New buildings quality for a building grant of 35% (45% in the case of projects new to the area). In addition, manufacturing employers in these areas receive regional employment premium at the

weekly rate of £150 for each male worker employed (less for women and young persons). This premium is to be discontinued from September 1974.

Since 1967, those parts of the depressed regions with the most acute problems of unemployment have been designated as Special Development Areas. Originally these were the areas that were being hardest hit by colliery closures, but the classification has since been extended to include other parts of development areas where unemployment has remained at persistently high levels. In these special development areas there is an additional incentive of a 30% operational grant towards the cost of salaries and wages during the first three years of operation by a new industrial project.

In the Intermediate and Development Areas firms may, for projects new to the area, opt for a 2-year rent-free period in a Board of Trade factory as an alternative to receiving a building grant. In the Special Development Areas, a 5-year rent-free period is available as an alternative to the building grant and the operational grant.

In all the assisted areas grants are available towards the cost of training and transferring workers. In the Development and Special Development Areas removal grants and loans for general purposes are also available.

The self-governing province of Northern Ireland, which has the most serious regional problem in the UK, offers a more extensive range of financial incentives to encourage industrial development. In addition to the normal Development Area incentives, capital grants ranging from 20% to 40% of the cost of new machinery and equipment and from 35% to 55% of the cost of new buildings are available to projects which are regarded as especially attractive to the region. There are also grants towards the cost of transferring plant into the region, and towards the cost of establishing operations.

Throughout the United Kingdom, grants are available to local authorities for improving the industrial infrastructure and for clearing industrial dereliction. The provision of new roads (also hospitals, schools, etc.) feature strongly in public expenditure programmes at national and local level. While there is no specific element of regional assistance in this expenditure, it is the assisted areas which generally have the poorest infrastructure and the worst dereliction. Consequently, expenditure in these fields tends naturally to be concentrated in the assisted regions.

(b) *France*

The three principal objectives of French regional policy are the de-centralisation of industrial and commercial activities away from the congested Paris region, the establishment of new industries in regions where traditional industries are in decline (particularly the Nord, Pas-de-Calais and Lorraine coal-

fields and the Vosges textile area), and the introduction of modern industry into the under-developed agricultural regions of the West and South West.

Regional planning has been an integral part of national economic planning for the past decade. The fourth plan, beginning in 1962 set target rates for the development of each region within the framework of national growth.

Controls over industrial development in the most congested regions feature strongly in the instruments of French regional policies. A Government permit is required before any industrial building covering more than 1 000 square metres can be erected in the Paris or Lyons areas. There is also a continuous review of the functions of the various Government departments in the Paris region, with a view to identifying those which could conveniently be re-located in other parts of the country. De-centralisation grants are payable to firms which decide to move away from the Paris region—in the case of industrial operations this grant amounts to 60 % of total re-location expenditure.

In the depressed regions, the establishment of new industries is encouraged by the payment of investment grants—at rates up to 25 % for new projects and 15 % for extensions. The highest rate of grant goes to the four "special conversion zones" where it is hoped genuine new growth points can be successfully established—Nantes-St. Nazaire, Bordeaux, Limoges, and Montpellier. In the development regions, loans are available from the Economic and Social Development Fund at a reduced rate of 6 % for periods of 10-15 years; and regional development corporations may take holdings of up to 35 % of a company's capital for up to 15 years.

There is a total or partial exemption from business tax for a maximum period of 5 years under the regional de-centralisation and development programmes, an amortisation rate of 25 % for capital expenditure in the West and a reduction in the conveyancing tax on the purchase of land or buildings.

In certain parts of Western France subsidies are available which reduce the price of land to 6 francs per square metre. Natural gas is available at reduced prices in the South West, and there are reductions in the price of electricity for new industries in Brittany. Training grants are also available in the development regions.

In an attempt to make the industrial environment of the depressed regions more attractive for new industrial development "a number of semi-public companies have been set up in France to carry out major regional infrastructure projects in the agricultural or tourist fields, or for the generation and distribution of hydroelectric power. Projects of this kind have been completed, or are in progress, in Provence, Languedoc and the South West."[10]

10 *A Regional Policy for the Community.*

(c) *Germany*

Regional policy in Western Germany is directed towards easing the problems of the primarily agricultural areas, the frontier zones, and the coalfield areas. Since 1958 a number of growth centres have been established "to absorb migrants from the land by the industrial development of small and medium sized towns located in the countryside at a sufficient distance from the big conurbations, and to provide a counter weight against the pulls exercised by the latter."[10]

The main instruments of regional policy are:

(i) investment grants ranging from 10% of total investment for industrial rationalisation projects to 25% for the establishment of new enterprises;
(ii) loans to companies covering up to half the total investment cost of the project at low interest rates;
(iii) grants covering up to 60% of the cost of developing industrial land;
(iv) subsidies paid to offset the high transport costs incurred by companies situated in the frontier zones;
(v) an investment allowance of 10% of capital expenditure against tax;
(vi) the Federal and Land Governments stimulate the improvement of the industrial environment in the regions by substantial infrastructure investment.

(d) *Italy*

In its five year economic programme for the period 1966-1970, the Italian Government set the objective of closing the development gap between the under-developed regions—particularly the Mezzogiorno—and the most advanced regions within a period of 15 to 20 years. As we have seen, regional problems in Southern Italy are the most serious in Western Europe.

The principal agency for assistance to the south is the *Cassa per il Mezzogiorno* (the development fund for Southern Italy), established in 1950 with the task of promoting the modernisation of infrastructure, agriculture and industry. The principle instruments of regional assistance are:

(i) capital grants of 20% for investment in industrial buildings and 30% for plant and machinery;
(ii) loans at low rates of interest;
(iii) firms setting up in the south receive an exemption from corporation tax for a 10 year period;
(iv) a 50% reduction in turnover tax, excise duty on motor fuel, and in certain railway freight rates.

Over and above these incentives, the Government now allocates at least 40%

[10] *A Regional Policy for the Community*

of total public sector investment to the south. This includes the nationalised industries, which play a major role in the Italian economy.

The Mezzogiorno is such a large area that it has been considered wise to concentrate industrial development in a number of favourable locations, rather than spreading the available resources too widely and too thinly. In consultation with the EEC Commission, this theory has been developed into the concept of a large integrated industrial growth centre, and the Bari-Taranto-Brindisi area has been selected to fill this role.

Regional incentives are also available to encourage industrial development in the agricultural provinces of north and central Italy, but they are generally not as extensive as the incentives in the Mezzogiorno.

(e) *Belgium*

Although there is a general commitment in Belgium to assist the more depressed regions, the objectives of regional policy have, according to "A Regional Policy for the Community", never been clearly defined.

The principle instrument of regional assistance is a rebate on normal rates of interest. Capital grants are also available for new industrial projects, ranging up to 30% for factory buildings and 10% for plant and machinery. Investment in the development areas can be depreciated at an accelerated rate for tax purposes, and there is a 10 year exemption from real estate tax.

(f) *The Netherlands*

Dutch regional policy is aimed at developing those regions which are still heavily dependent upon agriculture, introducing new industry into areas where coal-mining and textiles are in decline, and limiting congestion in the main conurbations.

Regional Infrastructure improvement occupies a key place in regional policy, and the bulk of expenditure in this field has been concentrated in the agricultural provinces of the north. New industrial projects in the development areas receive a capital grant of up to 25%, based on the amount of factory floor space provided. There is also a 50% reduction in the purchase price of land acquired for factory development; and interest rate rebates are available in Limburg.

(g) *Community Regional Policies*

The regional policy measures of the individual member states are supplemented by a number of Community instruments of regional policy.

First, the Guidance Section of the European Agricultural Guidance and Guarantee Fund (FEOGA) provides Community funds towards projects for structural improvement in the agricultural industry. Assistance under this programme currently amounts to £100 million per annum, and this is naturally concentrated amongst the low income agricultural areas of southern Italy, France and Germany.

Second, the European Social Fund contributes 50% of the cost of retraining and rehousing workers in new employment. The Fund is also able to contribute to maintaining workers' wages when a company switches its operations away from a declining industry and into a new field. However, because such situations are highly unusual, the Fund has made no "reconversion" payments of this kind. On the retraining and rehousing side, the Fund contributed a total of $ 43 million between 1960 and 1966 towards retraining over 200 000 workers and rehousing 300 000.

Third, the European Investment Bank, established under Article 130 of the Treaty of Rome to contribute to the "balanced and stable development of the common market", plays an important role in the regional development of the Community. It assists member states in the provision of funds for regional projects, generally in the field of infrastructure improvements. Up to the end of 1967 it had advanced a total of $ 1 000 million and its powers of finance have since been increased to $ 1 500 million. The EIB has played a major role in financing the Mezzogiorno growth centre project in the Bari-Taranto-Brindisi area.

Finally, the Treaty of Paris gave the European Coal and Steel Community powers to assist coal and steel producers in difficulty, to assist in mitigating unemployment in the coal and steel industries, and to promote the re-employment of redundant coal and steel workers. The Treaty provided for aid in the field of "readaptation" and "reconversion" the first for the retraining and rehousing of workers, and the second for advancing capital to industries likely to employ redundant manpower from the coal and steel industries. Between 1954 and 1967 the ECSC contributed about $ 100 million towards the "social" costs of the run-down in coal and, to a lesser extent, steel. Between 1960 and 1967 a further $ 100 million was advanced to stimulate the development of new industries in coalfield areas.

The effectiveness of regional policies

The assessment of the impact of policy measures on regional problems is a complex field. Statistical information is often inadequate—either in its accuracy or its coverage—to provide a full and comprehensive analysis of developments. And, of course, as regional policies are actually in existence and being applied, it is not easy to judge what the position would be in their absence.

Nevertheless, the armoury of regional measures employed in most West European countries is fairly extensive, and it is important to know whether or not this large-scale commitment of resources is generally meeting with some success. For the Community countries, some guide to progress can be gained from statistics presented by the Commission in "A Regional Policy for the Community" and in their 1971 regional study.[11]

In France, the annual increase in income per head in the Paris Region was 7.3 % per annum between 1962 and 1967, against a national average increase of 7.2 %, so there was a slight increase in wealth in the capital city in relation to the national average. In 1967 the Paris figure stood at 155 % of the national average. By contrast, average income per head in the Eastern region marked time at 90 % of the national average, and it actually fell in the West from 87 % to 85 % of the average.

Of the 21 Basic Administrative Units in France, 11 showed a reduction in wealth per head compared with the national mean over this period. The areas concerned were generally the agricultural provinces of the south and west, and those in the north-east where traditional industries are in decline (Nord, Lorraine). The area with the lowest per capita income in 1962—Midi—Pyrenees—had fallen even further below the national average by 1967 (from 81 % to 80 %).

In Italy, progress has been rather more marked. GDP per capita in the industrial North West fell from 153 % of the national average in 1957 to 140 % in 1969. In the South it rose from 61 % of the average to 68 % by 1969. Some improvement was recorded in most of the individual regions, the only significant reduction being in Sardinia.

While this progress towards alleviating the acute problems of the Mezzogiorno is indeed heartening, the difficulties in this region remain enormous. Part of this gain results from the slow increase in population, stemming from the substantial migration towards the north. It is important to remember that average wealth per head in Calabria, the poorest region, is still no more than 50 % of the Italian average—and only 33 % of the Community average.

In West Germany, there has been considerable progress in reducing the already narrow disparities in regional wealth. Rates of growth in the main industrial centres have, generally, been below those in agricultural areas, so that, by 1970, the range in GDP per capita between the four main geographical zones was as little as 7 percentage points—from 96.5 % of the national mean in the South to 103.5 % of the national mean in the West.

Most individual regions which were below the national average wealth in 1957

[11] *L'Evolution Regionale dans la Communauté.*

have become relatively better off. However, one area where a particular problem has developed, associated with the run-down in coal, is the Saar. Here GDP per head fell from 97% of the average in 1957 to as little as 80% in 1968, but has since recovered a little to 87% (1970).

In Belgium the picture is one of steady gains in Flanders and steady decline in the Walloon region. In Wallonia GDP per capita was fractionally above the national average in 1957; by 1966 it was down to 90%, and by 1968 to 87%. The Flemish region improved its position from 87% of the average in 1957 to 94% by 1968. This contrast highlights the problems of decline in the Walloon coalfield and agricultural areas. It would appear that the regional policy instruments applied in Belgium are not strong enough to cope with these difficulties.

Average wealth in the Brussels region has remained fairly constant at between 140% and 145% of the national average.

In Holland there has been a slight gain in wealth per head in the industrial West at the expense of other parts of the country in recent years, but this has not significantly widened regional disparities. Amongst individual areas there were reductions relative to the mean between 1960 and 1968 in Groningen, Drenthe and Zeeland (mainly agricultural) and Limburg (coal-mining). On the other hand, absolute rates of growth were high throughout Holland over this period, and this tends to offset the problems of regions with relatively low average wealth.

Turning to the problem of congestion in the main industrial conurbations of the Community, the 1960s have generally seen some reduction in the rate of population increase in these areas. In Germany, population growth in the main industrial regions of Hamburg, Bremen and North Rhine-Westphalia in the 1960s has been well below the 1950s, whereas there was a slight acceleration of growth in the Federal Republic as a whole. There has been no population growth at all in Hamburg since 1961.

French policies to limit the expansion of Paris have brought about a reduction in population growth in the city and its environs between the 1950s and the 1960s, despite an increase in the national rate of growth. However, the rate of growth in Paris remains above the national rate, so the proportion of the population crowded into this small area continues to mount.

In Italy, the national increase in population growth between the 1950s and 1960s has been shared by all regions, but there has been a continuing migration away from the South towards the industrial North-West.

In Belgium, there has been a large increase in the rate of population growth in the Brussels region during the 1960s. In Holland, on the other hand, population

growth has slackened in the industrial regions of the West, thus reducing the pressures of congestion.

In the United Kingdom we find that the level of unemployment (the principal indicator of regional disparities) in the three most under-developed regions outside Northern Ireland—Scotland, Wales and the North of England— has approximately doubled between 1960 and 1971 (see figures in Table G). In Scotland the rate has risen from 3.6% to 6.2%, in Wales from 2.7% to 5.0% and in the North of England from 2.9% to 6.3%. In the prosperous South East of England unemployment has also doubled—from 1% in 1960 to 2% in September, 1971. So the level of unemployment in Scotland and the North continues to be approximately three times as severe as in the South East, while Welsh unemployment remains at 2.5 times the South Eastern rate. Regional policies have not therefore succeeded in narrowing the gap between Britain's most affluent region and her most depressed regions to any significant degree.

Investment incentives play a major role in UK regional policy. While a comprehensive analysis of industrial investment by regions is not available, some indication of the regional spread of investment in factory building can be gained from figures of Industrial Development Certificates issued (see Table H). These show that the factory capacity approved in Scotland, Wales and the North, increased three-fold between 1962 and 1969, while approvals in the congested South East and the West Midlands were held at a fairly constant level throughout this period.

Figures of investment grants paid also indicate the direction of a substantial proportion of new investment towards the three depressed regions—they received 36% of all grants in the fiscal year 1968/69.

The dominant feature of these statistics, however, is that the region receiving the largest sum in investment grants and the highest level of factory building approvals is the South East. Some reduction in the level of development here may now be necessary in order to encourage a higher level of activity in the assisted areas.

The overall conclusion from this analysis must, of necessity, be rather cautious. However, it would appear that regional policy measures have not succeeded in narrowing the gap between rich and poor regions in France, Belgium or Britain. Some headway has been made in Italy, but the problems here remain as serious as ever.

However, it must be added that the natural tendency would be for people and prosperity to concentrate increasingly in the main industrial growth centres of each country, to the detriment of the outlying regions. While regional policy has not actually succeeded in narrowing regional disparities in every country, it would be broadly true to say that it has at least held the position and stopped

regions drifting further apart. This is a considerable achievement and should be regarded as a success.

Regional policies seem to have had rather more impact in combatting increased congestion in major conurbations. This, however, has generally been regarded as a *secondary objective of regional policy, and direct* measures in this field have only been adopted in France and Britain.

For all these achievements in reducing population growth in the conurbations, nevertheless the cities continue to become steadily more congested. And while the gap between rich and poor regions has generally not widened, the problems of poverty, unemployment, bad conditions and poor standards of living in the depressed regions remain.

As technology, economic growth and standards of living generally advance, so the pressure of congestion is likely to intensify. Equally, it would seem that the people of the less developed regions will become increasingly concerned about their own well-being, and will be expecting a steady reduction of the gap between their wealth and opportunities and those in the more prosperous regions.

It is, therefore, not enough merely to hold the position, as we are at present. It is likely that we will need a more comprehensive set of regional policy measures *in the future.*

Stronger regional policies

To stimulate a faster rate of economic development in the less developed regions, more firms must be attracted to establish operations there. We have seen that regional policies have succeeded in holding the income gap between the richer and poorer regions, but have not succeeded in bringing them closer together. Sufficient industrial development has been attracted to the regions to maintain this position, but not to stimulate a truly vigorous rate of economic growth that would lift the less developed regions towards the level of the more affluent.

Despite the varied regional incentives available in every West European country—and in some countries these incentives are considerable—the great bulk of industrial expansion continues to be concentrated in the main growth areas. To understand why industry is not moving into the less developed regions on a larger scale is at first sight difficult. *It is, however, easier to understand why* firms *are* establishing themselves or expanding their operations in the main industrial centres of a country.

I have already touched on the problem of industrial location. The advantages

to a company in setting up in a big industrial growth centre are obvious. First, it will be situated close to its major market centre so transport costs of distribution are kept at a minimum. Second, the company will be able to draw on skilled manpower that has grown up with the development of a major industrial complex. Third, the company is likely to be close to its suppliers of component parts and raw materials or, alternatively, close to a port suitable for handling imported material. Fourth, the largest industrial conurbations generally have the best transport links with both inland and overseas destinations. Fifth, the large centres will tend to have the best social and cultural facilities and very often the highest standards of social services for the wellbeing of employees. Finally, many service industries are concentrated in and around the main growth centres. These services play an essential supporting role in many manufacturing activities, and it will often be in a firm's best interests to establish or extend operations in places where there is a fully comprehensive range of services—finance, insurance, advertising and marketing consultants, design specialists, experts in the repair and maintenance of complex plant, etc. There may also be an advantage to an industrialist in being located in reasonable proximity to his competitors so that he can keep in close touch with market developments, and keep an eye on what his rivals are up to.

Away from the main growth centres, a company may genuinely feel that it would be at a real disadvantage. It might suffer from remoteness from main markets and component suppliers, a limited local labour force, and lack of knowledge of developments in the mainstream of the industry. The economies of agglomeration gained by locating plant in large industrial centres are very real. So also are the economies of scale obtained by expanding a company's operations on or adjacent to an existing site.

Against this, however, we have seen that there are also very real costs associated with development in congested areas. The costs incurred through loss of amenity, cramped living conditions, heavy traffic flows and the impact of these factors on physical and mental health are borne by the community as a whole. But heavy congestion costs are also borne by the individual industrialist. Some of the cost can be directly measured; for example, wage rates, the cost of land, rent and rates tend to be higher in congested areas than in the less developed regions. The differences can sometimes be of staggering proportions. Indirect costs are not easy to measure, but their effects are very real. A firm's own transport costs will be heavily influenced by the traffic delays in congested areas; each of the firm's employees will be commuting to and from their place of work, placing considerable demands on the capacity of public transport and the road network; the fact that workpeople are living and working in a heavily congested area may not be conducive to the achievement of the highest standards of efficiency and good workmanship; there may also be an environmental impact upon the health and welfare of employees.

It is quite likely that if a firm were able to assess the many and varied congest-

tion costs that it incurs directly and indirectly, these would outweigh the economies of agglomeration and the economies of scale that it would gain from a location in a major industrial complex Development away from these areas may very often be the "best buy" in real terms. What is needed is an overall total sum assessment of the benefits and costs to the community as well as to the firm in the assessment of a location decision.

Much can be done by industry in coming to terms with the reality of the economics of location. The advantages and disadvantages of the major industrial centres should be fully explored and compared with the advantages (including financial incentives) and disadvantages of location in an assisted area. If industry can adjust its calculations in this direction, and look beyond the direct accounting costs of one location decision over another, it is likely that there will emerge a new and dynamic movement of industry towards greater development in the regions.

There could be a major role here for industrial organisations, comprising both employers and trade unions, to stimulate a re-direction of location philosophy to take account of all these relevant factors. Courses could be arranged for company planners, and campaigns launched to highlight the importance of the total sum approach to a company's location decisions. Suitable aspects could also be studied from the trade unions' viewpoint.

Having seen the important contribution that industry can by itself make to accelerating economic development in the assisted regions by taking full account of congestion costs in arriving at location decisions, it must be said that the prime responsibility for encouraging regional development rests necessarily with government. It is they who frame regional objectives and implement regional policy measures.

I have already suggested that we need a stronger and more comprehensive set of regional policy measures throughout Western Europe. I would like now to discuss the need for a common approach to regional problems, and to suggest, as a basis for discussion, a number of specific areas for policy development.

The Commission of the Community has for some years believed that a new initiative in the field of regional policy is imperative. In 1968 Jean Rey, President of the Commission, said "regional policy in the community should be as the heart is in the human body. In the same way that the heart pumps the life blood into all the parts of the body, so should regional policy aim to reanimate economic life in regions which have been denied it." The Commission believed that a firmer line needed to be taken if Europe's regional problems were to be successfully resolved, and that it was important for the community to adopt a common approach to regional difficulties. In 1969 Hans von der Groeben, Commission Member for Regional Policy, said "structural differences in our Member States not only work to the detriment of the whole and

the individual, but threaten the very development of the Common Market."

In 1969 the Commission published its Memorandum on Regional Policy which included a proposal for a Council decision on the organisation of Community instruments for regional development. The proposals were as follows:

(i) the Commission should carry out a regular examination of the regional situation with Member States, and draw up development plans for the regions in greatest need;

(ii) the Commission should be empowered to recommend particular courses of action to Member States, so as to achieve a better coordination of regional policy measures throughout the Community, particularly in frontier areas;

(iii) interest rate rebates should be made available on loans through the European Investment Bank. A Regional Development Rebate Fund should be established to administer these incentives;

(iv) a Standing Regional Development Committee should be established composed of representatives from each Community country and from the Commission. This Committee should examine the regional policy forecasts and programmes prepared by Member States, and make recommendations.

(v) the Commission and Member States should regularly examine the scope of funds allocated to regional development to ensure that they are adequate;

(vi) in order to ensure that industry is fully aware of the opportunities and incentives for development in depressed regions, the Commission should ensure that information is widely publicised and that industry is fully consulted on questions of regional development.

By ensuring that there is a regular and continuing examination of regional problems, these proposals would considerably strengthen the instruments of regional policy at Community level. The proposals must, however, be regarded as a cautious approach towards the problems of regional imbalance. While they would lead to greater consultation and coordination of policy measures throughout the Community, they do not go very far towards the adoption of a common policy.

While recognising that progress in this field must necessarily be slow, it is important to remember that a common regional policy will become essential as the Community moves towards the goal of economic and monetary union. At the present time, if a country encounters severe balance of payments problems, it has in practice remained free to devalue its currency and so restore the equilibrium in its foreign trade. Within a monetary union, this approach is no longer available. Once currencies are unified, individual Member States must be regarded as regions of a wider Community, and regional policy must be strong enough to provide solutions to any severe imbalances that might arise for which devaluation might otherwise be considered the most suitable course of action.

While it will become increasingly necessary, a common approach to regional problems is also highly desirable. The argument that the overall level of economic growth and standard of living in an individual country will benefit if under-employed resources in depressed areas can be brought into full production applies with even greater force at Community level. If all the resources of ten member countries can be brought to bear in a concerted and coordinated manner on the regional problems of the Community as a whole, solutions are likely to be found more quickly and more effectively.

The adoption of a common approach to regional problems in the European Community seems to me to be of paramount importance. Progress towards the solution of regional imbalances will be to the benefit of each individual member country, and to the Community as a whole. But we must ensure that the ideal of a common policy does not become synonymous with a rigidity of outlook on the complex problems of regional development. While there are obvious similarities in the regional problems of the various European nations (e.g. declining coalfield areas and under-developed agricultural regions), nevertheless the individual difficulties in a particular region are closely related to its character —climatic, geographical and cultural—and must therefore to some extent be regarded as unique to that area, It is therefore important to retain flexibility in the approach to regional problems—flexibility of action and of interpretation, both at national and Community level—so that local problems can be tackled effectively.

Of the Commission's various proposals on regional policy, I believe the most important is the recommendation for the establishment of a Standing Regional Development Committee. It is vital that such a forum should be established at Community level for the exchange of ideas and information and the generation of policy recommendations. This Committee will act as the connecting link between regions in the common search for faster and more balanced economic development.

To complement the Commission's proposal, I would suggest that this Committee should, at an early date after its establishment, ask Member countries for a full explanation of their regional policy objectives, a detailed outline of the policy measures currently in operation and any additional measures that might be considered necessary for the achievement of their objectives, and an assessment of the costs of these policies. The Committee could then examine these reports, identify the common features, and perhaps recommend the positive adoption of common policy instruments in those areas where there is considerable similarity of approach. The Committee would also, no doubt, be considering what proportion of Community funds should be made available to regional development programmes.

In due course, the Committee would undoubtedly turn its attention to the question of achieving a common approach to the degrees of assistance available

for the encouragement of industrial development in the regions—to ensure that two depressed regions with broadly similar problems in two different countries receive broadly similar levels of assistance, so as to secure an even rate of progress in the solution of regional imbalances.

In this context, it might be helpful to consider a suggestion that has been made from time to time in the United Kingdom—that the whole country should be divided, for regional policy purposes, into four zones: development, intermediate, neutral and congested.[12]

Incentives and disincentives could then be directly geared to the requirements of these four types of regions by, for example, a payroll tax or subsidy. Employment in the congested areas would be taxed at a high rate, while the neutral areas would attract a lower rate of tax (or possibly no tax at all). Employment in the development areas would receive a sizeable subsidy, while intermediate areas would receive this incentive at a reduced rate. It is possible that a policy along these lines might be attractive in an enlarged Community. There is, of course, no reason why the number of zones adopted under such a system should not be larger. A very good case could be made for placing the Mezzogiorno in a special category of its own, attracting the highest rate of incentive in the whole of Western Europe. I recognise that there is some doubt about the validity of a direct subsidy to labour under the terms of the Treaty of Rome, and it would be possible to apply an alternative system of incentives and disincentives to the various zones.

Such a system would be an extension of the philosophy behind the Community's decision in October, 1971 (on a proposal from the Commission) to classify regions as peripheral or central, and to restrict the value of any investment incentives in central regions over and above the normal nationwide levels of assistance to 20% of the investment cost. The peripheral regions are the Mezzogiorno, West and South West France, West Berlin and the German frontier zones—all other areas are classified as central.

I would like to turn now to a number of specific proposals that occur to me as an interested observer of European regional development. We have seen that the regional policy measures adopted in Britain and the Community countries have, broadly, overcome the tendency for the gap between rich and poor regions to widen, but have not generally succeeded in bringing regions closer together. The solution to the problems of regional imbalance seems therefore to demand stronger action. In order to overcome the natural tendency for growth to be concentrated in and around the main industrial conurbations, we seem to need greater incentives to development in the less developed regions, and greater disincentives to development in congested areas.

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12 See for example the Hunt Report on Intermediate Areas (Minority Report by Professor Brown) and the Labour Party Study *Regional Planning Policy*.

I offer these suggestions only as examples of the fields where there may be scope for strengthening the existing framework of European regional policy measures. Within the broad issue there are a number of particular problems.

For example, we have seen that the problems of many regions are associated with the gradual rundown of the coal industries which began in the middle 1950s and has continued to the present time. This is true in Britain, France and Belgium and, to a lesser extent, in Germany and the Netherlands. In recent months, however, there has been mounting public concern over the security and price of energy supplies, following the dislocations in the oil market during the winter of 1970/71 and the substantial price increases secured by the oil producing countries. It is now widely recognised that a substantial base of indigenous energy production is likely to be the most effective means of ensuring that the availability of energy supplies is sufficient to meet the rapidly growing requirements in Western Europe.[13] Coal remains the major source of indigenous energy in Europe. A concerted policy of stabilising coal production throughout Western Europe would, therefore, have two great attractions. First, it would guarantee improved security of energy supply. Second, it would eliminate the pressures of decline in the coalfield areas, and greatly reduce their regional problems. I believe that this could be one of the most effective single regional policy options available to us today.

We have seen the importance of developing an adequate social and industrial infrastructure in the less developed regions. I believe that this will continue to be of prime importance, and that every encouragement should be given to increased activity in this field. As the industrial environment in a region is improved, so a larger number of companies will be encouraged to establish operations there.

All parts of the Community currently benefit from subsidies and assistance paid under the common agricultural policy. Indeed, support for agriculture accounts for the great bulk of the Community's annual budget. Of a total budget of $ 3 055 million in 1971, the European Agricultural Guidance and Guarantee Fund will receive $ 2 630 million—86 % of the total Less than 10 % of the Agricultural Fund will go to the Guidance Section for the promotion of structural improvement in agriculture. The remainder will go in support for Community farming. I believe that the time may now be approaching when we should be thinking in terms of directing financial support to a much greater extent towards the encouragement of industrial developments in areas where the proportion of the population employed on the land is very high, and rather less towards the direct support of agriculture. It is precisely because some regions are very heavily dependent upon agriculture and that their industrial base has grown only slowly, that they are economically depressed today.

[13] For a fuller analysis of the importance of an indigenous energy policy see *Energy Resources for Western Europe* published by the Association for Coal in Europe, 1971.

The undoubted aim of regional policy is the stimulation of faster industrial growth in the less developed regions. Where a region remains predominantly agricultural, this must inevitably mean a move of workpeople away from the land and into the factories. From a regional policy standpoint, therefore, the continued support of agriculture in such region appears counter-productive.

The Commission has extended its regional studies since publication of its Memorandum on Regional Policy in 1969, and in October, 1971 proposed that $ 250 million should be spent over the next five years in subsidies to employers at the rate of $ 1 500 for each new industrial job created for a farmer or one of his children. This would be another important step in fostering economic growth in the underdeveloped agricultural regions. In itself, however, it probably will not go far enough. What is needed is the allocation of substantially increased resources, both on a Community and a national basis, to the solution of the regional problem through the stimulation of a faster rate of industrial development in the less developed regions. If this is not done quickly the social and economic imbalances will become more marked and act as a major restriction on the growth and wellbeing of the Community as a whole.

Revised Regional Incentives in the UK

The Government published a White Paper on industrial and regional development on March 22nd 1972. In its introduction on regional policy, the White Paper states:

"The problem of the older industrial areas is deep-seated and long term.

Its most serious symptom is the high level of unemployment, but there are others—net outward migration, slow economic growth, derelict land, old and obsolete factory buildings and often a relatively low level of amenity. Symptoms such as these only too often turn into the causes of further decline.

"The ending of regional imbalance has been an objective of successive governments in the UK for nearly four decades. Much has been achieved but no solution is yet in sight. ... It is clear that the accumulated measures of the years are not enough."

The main changes introduced in this White Paper are as follows:

(a) free depreciation in the form of a 100% first year allowance will be available throughout the country on all investment in machinery and plant. New industrial buildings and structures will receive an initial allowance of 40% in all parts of the country. (Previously, investment in machinery and plant attracted a first year allowance of 80% in non development areas, and 100% in development areas. The tax allowance on industrial buildings was 30% in non assisted areas and 40% in assisted areas).

(b) these measures eliminate all tax related incentives to regional development. The government is introducing a new system of *cash grants* to stimulate industrial development in the regions. These new grants will also supercede the building and operational grants at present available under the Local Employment Act. The new grant will be available to firms already established in the assisted areas on the same basis and at the same rates as to incoming firms. They will also be available for modernisation projects, as well as for new developments. In the special development, development and intermediate areas and, for two years, in derelict land clearance areas, regional development grants will be made towards capital expenditure on buildings in the manufacturing, mining and construction sectors. In the special development and development areas, regional development grants will also be made towards capital expenditure on new plant and machinery and on mining works. Regional development grants will be at the rate of 22% in special development areas and 20% in other assisted areas. The structure of the grants will then be as follows:

Regional Development Grants in Assisted Areas

(in %)

	Plant Machinery and Mining Works	Buildings
Special Development Areas	22	22
Development Areas	20	20
Intermediate Areas	.	20
Derelict Land Clearance Areas (for two years only)	.	20

(1) The new grants will not be treated as reducing the capital expenditure which qualifies for capital allowances for tax purposes

(2) Regional development grants will be made in respect of capital expenditure on new buildings and new plant and machinery and mining works on premises wholly or mainly occupied for carrying on the qualifying activities in manufacturing, mining and construction.

There are two important new departures in these revised regional incentives. First, the nationalised coal and steel industries will qualify for regional development grant for all their activities in the regions. (Other nationalised industries are not excluded from the new arrangement, but their operations will not, in general, qualify for grant). Second, tax allowances will be given on the full capital expenditure even when part of the expenditure is financed by regional development grant.

(c) The government is revising the boundaries of assisted areas so that the whole of the North West and Yorkshire and Humberside planning regions outside the present development areas will receive intermediate area status.

French regional statistics

(Figures relate to 1968 except where stated)

Population Density eople per km²)	Unemployment %	Agriculture as % of Total Employment	Average GDP Per Capita $ (1962)	Relation to National Average
781	1.9	1.1	1 558	1.30
63	1.1	18.4		
123			1 563	1.31
72			994	0.83
82			1 230	1.03
50			1 087	0.91
48			979	0.82
52			995	0.83
309	1.8	8.3	1,298	1.09
77	1.2	29.5		
91			863	0.72
81			1 012	0.85
58			904	0.75
98	1.1	11.9		
97			1 288	1.08
171			1 207	1.01
62			1 159	0.97
52	1.8	25.2		
43			946	0.79
60			1 130	0.94
48			891	0.74
83	1.3	14.2		
51			1 000	0.84
102			1 242	1.04
78	3.2	13.7		
63			987	0.82
106			} 1 158	0.97
24				
92	1.6	14.7	1 196	1.00

TABLE D

Regions	Area as % of Total	Population as % of Total	Change in Population 1958–68 %	Population Density (People per km
North-West –	11.2	11.7	+ 12.9	184
Piemont	8.3	8.0	+ 13.9	169
Val d'Aosta	1.1	0.2	+ 10.2	33
Liguria	1.8	3.5	+ 10.7	344
Lombardy –	7.8	15.3	+ 16.8	345
North-East –	13.1	11.3	+ 4.6	153
Trentino Alto Adige	4.5	1.5	+ 8.6	61
Veneto	6.0	7.5	+ 4.8	221
Friuli-Venzia Giulia	2.6	2.3	+ 1.5	161
Emilia-Romagna	7.3	7.1	+ 5.0	172
Centre –	14.5	10.3	+ 3.4	136
Tuscany	7.5	6.4	+ 5.9	149
Umbria	2.8	1.4	– 2.0	93
The Marches	3.2	2.5	+ 0.4	140
Lazio	5.7	8.5	+ 21.1	265
Campania –	4.5	9.5	+ 11.3	378
Abruzzi-Molise –	5.0	2.8	– 2.8	101
Abruzzi	3.4	2.2	– 1.2	112
Molise	14.6	0.6	– 7.7	76
South –	14.6	11.7	+ 4.3	142
Apulia	6.3	6.7	+ 6.7	186
Basilicate	3.3	1.2	– 0.6	63
Calabria	5.0	3.8	+ 1.7	13[illegible]
Sicily	8.4	9.0	+ 4.8	18[illegible]
Sardinia	7.9	2.8	+ 8.1	6[illegible]
TOTAL	100.0	100.0	+ 8.7	17[illegible]

Sources: Regional Statistics
Basic Statistics of the Community

Italian regional statistics

1968

Population Density ople per km²)	Unemployment %	Agriculture as % of Total Employment	Average GDP Per Capita $	Relation to National Average
184	2.2	16.5		
169			*1 847*	*1.33*
33			1 759	1.27
344			1 870	1.35
345	1.9	7.3	2 050	1.48
153	2.4	22.5		
61			1 293	0.93
221			1 366	0.99
161			1 411	1.02
172	2.7	26.8	1 622	1.17
136	2.9	23.3		
149			1 528	1.10
93			1 264	0.91
140			1 171	0.84
265	4.2	14.7	1 481	1.07
378	4.3	27.4	916	0.66
101	4.6	42.2		
112			929	0.67
76			744	0.54
142	5.1	41.7		
186			910	0.66
63			789	0.57
137			682	0.49
189	3.7	31.5	912	0.66
62	4.8	32.7	941	0.68
179	3.2	*22.9*	*1 386*	*1.00*

TABLE E

Netherlands regional statistics

(Figures relate to 1968 except where stated)

Regions		Area as % of Total	Population as % of Total	Change in Population 1958–68%	Population Density (People per km²)	Un-employment %	Agriculture % of Total Employment	Average GDP Per Capita $ (1965)	Relation to National Average
North –		24.3	10.8	+ 10.8	156	2.9	17.0		
	Groningen	6.6	4.0	+ 8.9	212			1 253	0.94
	Friesland	10.4	4.0	+ 8.7	136			1 131	0.85
	Drenthe	7.3	2.8	+ 16.8	134			1 030	0.78
East –	(Includes IJsselmeerpolders)	27.7	18.7	+ 18.8	235	1.4	11.0		
	Overijssel (Includes IJsselmeerpolders)	13.7	7.1	+ 19.3	181			1 217	0.92
	Gelderland	14.0	11.6	+ 18.4	288			1 134	0.86
West –		20.6	46.5	+ 11.0	787	0.7	4.6		
	Utrecht	3.8	6.1	+ 18.3	562			1 176	0.89
	North Holland	7.9	17.4	+ 9.4	766			1 509	1.14
	South Holland	8.9	23.0	+ 10.3	902			1 524	1.15
South –		27.4	23.8	+ 16.8	304	2.0	9.0		
	Zeeland	7.4	2.4	+ 6.6	112			1 228	0.93
	North Brabant	14.0	13.7	+ 20.3	343			1 268	0.96
	Limburg	6.0	7.7	+ 14.1	448			1 204	0.91
TOTAL		100.0	100.0	+ 13.5	349	1.4	8.1	1 326	1.00

TABLE F

Belgian regional statistics

(Figures relate to 1968 except where stated)

TABLE F

Belgian regional statistics

(Figures relate to 1968 except where stated)

Regions	Area as % of Total	Population as % of Total	Change in Population 1958–68%	Population Density (People per km²)	Un-employment %	Agriculture % of Total Employment	Average GDP Per Capita $ (1965)	Relation to National Average
North Region- (Flemish)	41.2	47.0	+ 5.9	397	2.5	7.0		
East Flanders	9.8	13.6	+ 3 8	439			1 574	0.83
West Flanders	10.3	11.0	— 0 4	334			1 762	0.93
Antwerp	9.4	15.8	+ 8.6	532			2 096	1.10
Limbourg	7.9	6.7	+ 16 0	266			1 368	0.72
South Region - (Walloon)	55.2	30 6	+ 2.8	187	3.3	7.0		
Hainaut	12.4	13.8	+ 4.4	352			1 588	0.83
Namur	12.0	4.8	+ 3.5	104			1 572	0.83
Liège	12.7	10.5	+ 1.0	263			2 012	1.06
Luxembourg	14.5	2.3	— 0.5	50			1 354	0.71
Brabant-(Brussels)	3.6	22.4	+ 11.4	640	1.8	2.6		
Brabant	11.0						2 454	1.29
TOTAL	100.0	100.0	+ 6.0	316	2.6	6.2	1 902	1.00

Sources: Regional Statistics and
Basic Statistics of the Community

TABLE G

UNITED KINGDOM

Unemployment percentage in the regions

	1960	1965	1966	1967	1968	1969	1970	sept. 1971
Assisted Regions								
Scotland	3.6	3.0	2.9	3.9	3.8	3.7	4.3	6.2
North	2.9	2.6	2.6	4.0	4.7	4.8	4.8	6.3
Wales	2.7	2.6	2.9	4.1	4.0	4.1	4.0	5.0
Other Regions								
Yorkshire + Humberside (a)	1.0	1.1	1.2	2.1	2.6	2.6	2.9	4.3
East Midlands (a)	1.0	0.9	1.1	1.8	1.9	2.0	2.3	3.3
West Midlands	1.0	0.9	1.3	2.5	2.2	2.0	2.3	5.6
East Anglia	1.0	1.3	1.4	2.1	2.0	1.9	2.1	3.2
South East	1.0	0.9	1.0	1.7	1.6	1.6	1.7	2.0
South West (a)	1.7	1.6	1.8	2.5	2.5	2.7	2.8	3.4
North West (a)	1.9	1.6	1.5	2.5	2.5	2.5	2.7	4.5
Totals								
Great Britain	1.6	1.4	1.5	2.4	2.4	2.4	2.6	3.9
Northern Ireland	6.7	6.1	6.1	7.7	7.2	7.3	7.0	8.8

(a) Parts of these Regions are also assisted.

TABLE H

UNITED KINGDOM
Factory building approved

(Industrial Development Certificates issued)

Million square feet

Region	1962	1969
Assisted Regions		
Scotland	3.7	9.1
North	3.0	9.9
Wales	2.1	8.3
Other regions		
Yorkshire & Humberside	2.4	10.7
East Midlands	2.2	4.1
West Midlands	3.7	5.9
East Anglia	1.8	4.0
South East	11.8	13.9
South West	2.4	4.2
North West	4.4	10.6
Great Britain	37.3	80.7

Note: Factory building approvals were at a generally low level in 1962.

CONDITIONS NECESSARY SO THAT INVESTMENTS BE UNDERTAKINGS OF MEMBER COUNTRIES BE INCREASINGLY DIRECTED TOWARDS THE LESS DEVELOPED REGIONS OF THE COMMUNITY:

FUNCTIONS OF INDUSTRIE AND PUBLIC AUTHORITIES(*)

M. DIDÒ

Introduction

Taking as a starting point the statement delivered to this meeting which is to seek the relations existing at Community level between a certain number of economic, social and political problems and industrial development, we see that the problem of development can no longer be approached only in quantitative terms nor by higher or lower rates of increase in national income but that it is necessary to go beyond this type of aggregate indices in order to ascertain what sometimes unsuspected or conscious realities lie behind them.

The address must, therefore, be enlarged to include qualitative aspects relative to the production method, to facets of distribution, to those of certain environmental "developments" and of the standard and quality of living.

We do not wish to make here a closer examination of these aspects (this will be done by other sources) nor do we wish to make a general accusation of quantitative aspects of industrial development.

On the contrary, we remain convinced that the process of economic progress and development is increasingly set in terms of industrialization.

The gap between quantitative and qualitative development is, in our opinion, clearly indicated by low rates of activity and employment, by pathological forms of underemployment of large sections of the labour force, placed at the fringe of the system, by the presence of conspicuous social transfers tending to reduce the increasing disparity between participation in the production process and participation in distribution.

Whether for the process of production inside an economic system or for the process of international integration, the problem of what, how and for whom to produce is still with us. In general these latter aspects, neglected in the compass of a national economic system, have never been taken into serious consideration as regards international integration by the prevailing theory and publicity.

(*) Translated from the Italian

We consider that, as in the past, these problems must receive our fullest attention, also that of Governments and Community organisations.

Also in connection with economic integration it is in fact important to ask oneself who carries out integration and in whose favour.[1]

At national and international levels it is necessary to go beyond the narrow limits of business efficiency and productivity motivated by private profit in order to refer to broader concepts such as those of social productivity. Only in this way can a correct estimate be made of the costs and benefits of certain economic phenomena and development processes, normally estimated in quantitative terms only.

We shall try to see briefly in the ambit of this large and complex problem which are the structural disparities between the various regions of the Community.

We shall, therefore, make a brief analysis of some aspects of the theory and policy of regional development, placing them in relation to the problem of the theory and policy of international and, in our case, European integration.

In doing this we shall work on the basic assumption that there is an analogy between inter-regional and international development, in the compass of a system of roughly mixed economy and we shall put in prominence the insufficiency of certain theoretical formulations which continue, nevertheless, to influence strongly the formulation of national and Community economic policy.

We shall see to what extent formulations of this kind have influenced in the past and still influence at present the elaboration of regional and structural policy of the Community, by carrying out a critical analysis of the principal documents on sectoral policies and on topics of a more general character like *regional policy which we consider as being a dimension included in all sectoral* policies and economic policy in general, and of Werner's report for its significant implications on institutional matters and the ambitiousness of the aims proposed.

We shall try to specify the reasons why productive investments, instead of being directed towards the less developed regions ("Mezzogiorno" of Italy, Southern and Western France, etc.) are increasingly concentrated in the more advanced or so-called "central" regions.

We shall try to demonstrate how this situation has stemmed from the spontaneous functioning of the economic mechanism at national and international

[1] See S Perroux, *Intégration Economique Qui intègre? au bénéfice de qui s'opère l'intégration? in Economies Appliquées, 1966.*

levels and how the problem is aggravated at Community level by the weakn
and insufficiency of existing and foreseen instruments to implement a poli
of rebalance and development.

Bearing in mind the aim of reaching a better balanced and harmonious develc
ment in accordance with indications contained in Art. 2 of the Treaty of Ron
we shall try to specify what in our view should be the role of public a
private undertakings at regional and Community levels.

The need which has emerged hitherto is that of having new and more efficie
instruments of regional policy at national level and, for a more valid reasc
at Community level, if the Community is to play in the future a role which
its own, which is incisive and not marginal, in the face of the serious probler
which afflict European society.

Such instruments, as we have said already must be graded and differentiat
according to the type of regions and to the type of investment.

With the same object in mind we shall indicate the fundamental lines of
syndical strategy at regional, national and Community levels which, conscio
of the extent and the seriousness of the problems under reference, has the ai
of creating the conditions for a participation of the labour forces and a di
ferent and fairer process of Community and international integration.

Some data on the structural disparities between Community regions

In the autumn of 1971, the Statistical Office of the European Communiti
published an analytical statement of data on regional development in th
Community.

Apart from the technical aspects concerning the measurement of the dispari
ties between advanced and less advanced regions, one observes in general that
despite the efforts made hitherto the disparity instead of tending to diminisl
tends to increase. The phenomenon of concentration of population in the mor
developed areas continues: from 1950 to 1969 the regions of Southern Ger
many, the Paris region and regions of North-Western Italy have seen thei
population grow from respectively 15.4 to 19.4 million, from 7 to 9.5 and fron
11.3 to 14.6 million. On the other hand, regions like North Germany, Wester
France and the North-East Italy have seen their population increase less tha
the rest of the Community.

The region which has experienced the largest flight of population, a phenom
enon of real mass emigration, has been the Mezzogiorno in Italy. It is reckon
ed that in the sixties, an annual average of 183 000 persons have left th
Mezzogiorno. Contrary to what might be expected, over 60% of the popula
tion has moved to countries outside the Community, whilst the majority o

labourers who immigrated to Member Countries has come from countries not belonging to the Community.

The total labour force employed in the Community agricultural sector was around 30 million in 1950, it dropped towards mid 1960 and stood at 11.5 million in 1968.

The ratio of agricultural employment to total employment which in 1950 touched the extremes in Italy (43.9%) and in Belgium (12.6%) was modified towards 1968 to 21.9 for the first country and 6.1% for the second. The Community produces these figures as a reduction in the disparity of the sector; this phenomenon seems obvious to us given the scanty meaning of the data in terms of percentages. In fact, behind those percentages hide quite different absolute data the comparison of which assumes a different importance. There remains the reality of large masses still employed in agriculture; there remains also the reality of the achievement of this result through the more costly way which is that of emigration, as already mentioned during the sixties at least, of 60% to countries outside the Community.

Italy and France remain the countries where the ratio of agricultural population is the highest; it is in these countries that the peripheric zones with high agricultural employment are the more numerous: 13 regions in Italy and 11 in France.

In the Community's industrial sector, as a whole, employment has moved from 26 million (in 1950) to 31 million in 1960, stabilizing at the latter level (42.7%) during the period 1960-68.

During the two periods the rate of employment in the secondary sector has increased in all countries except Belgium during the first period when it fell from 49% to 47.7% (1961) and to 43.4% in 1969, and in Germany during the second period when it moved from 49% in 1961 to 47.9% in 1968.

In the large geographical zones it has been observed that whilst in 1950 the regions with high employment in the secondary sector were concentrated in three large areas, the first from Northern France to Brunswick through the Benelux and the Ruhr, the second from Lorraine to Unterfranken, and the third substantially Lombardy, in 1968, through the process of development in the industrial sector of the intermediate areas, these three large areas were linked to each other.

Third sector. In this sector employment has gone from 23 million in 1950 to 28 million in 1960 and 30 million in 1968; the relative ratios of the dates mentioned were respectively 32.8%, 37.7% and 42.1%. The differences in ratios in this third sector which reached their peaks in 1950 in Italy with 26.6% and in the Netherlands with 45% were drastically reduced towards 1968 when the average was around 40% with a low of 37.3% for Italy.

Such information of a structural character seems to hint at some convergence but in general it is not much suitable for measuring the disparity; in fact it is limited to supplying percentages in the composition of employment in the various sectors without telling us how high this employment is and without telling us how productive it is.

In dealing with total employment one observes a reduction in occupation in 45 out of 100 Community regions. In this phenomenon 16 out of the 20 Italian regions were affected, 14 of the 38 German ones, 9 of the 21 French ones and 5 of the 9 Belgian and Luxemburg regions.

Of these 45 regions, 31 show that the increase in occupation outside agriculture has not succeeded to counter-balance the reduction in occupation in the agricultural sector. This has been the case particularly at the periphery of the Community i.e. in 8 regions of Western France, in 14 of Southern and Eastern Italy and in 5 of Northern and Eastern Germany.

In 14 regions, together with a reduction in employment in the primary sector, there has been reductions in occupations in the secondary and tertiary sectors also. Of these a first group includes the Eastern regions of the Federal Republic of Germany and a second group the coal-beds of Northern France and Southern Belgium.

Still referring to *1950*, *1960* and *1968*, the distribution in Community employment between the 20 large geographical zones has undergone modifications which have seen an increase in the ratio of certain regions (such as the Paris region, Eastern and Western Netherlands and Western Germany) in relation to total employment.

Contrarywise a reduction has been noted in regions such as Western France (from 10.62 to 9.78%), North-Eastern Italy (from 5.84 to 5.53 to 5.31%), Central Italy (from 5.50 to 5.41 to 4.98%) and again Southern Italy (from 9.36 to 8.64 to 8.22%).

Gross internal product and revenue. In this connection the dissimilarity of available information certainly does not help to get close to the reality of the situation; the disparity is partly lessened if the information on revenue is considered. Differences in structural character are clearer and more pronounced if for the single regions we obtain information relative to gross internal product. This information does not in fact include the contributions by public authorities through transfers; moreover, at least where Italy is concerned, regional information on revenue leaves much to be desired as to reliability. The other requirement concerning measuring data is that of having not only percentages but also absolute figures the simple meaning of which seems to us be very useful in obtaining a realistic idea on the nature of the disparity.

In France figures of direct income are available for 1962 and 1966.

In 1962 the disparity between regions of lowest index (the South and the Pyrenees = 3 804 FF) and the region with the highest index (Paris = 7 233 FF) was of 73.4 points. However the Parisian region is an exception and therefore if it is removed the disparity between maximum and minimum indices is lowered to only 14.2 points. But between 1962 and 1966 percentage increases in the various regions had a tendency to widen the disparity. A minimum of 3.5% was recorded in Auvergne, 5.2% in Higher Normandy, 1.8% in the Paris region. The difference between maximum and minimum indices in 1967 moved to 16.6 points.

In Italy the years taken in account are those from 1957 to 1966. In 1957 the Italian internal product for Calabria was 170 000 whilst that of the Valle d'Aosta was 611 000 (higher than the Community average). The disparity between the lowest and the highest index in Italy was at a maximum (124.7). In 1966 the disparity was still maintained at 98.5 points The closer figures are due, however, to a slowing down in the rate of increase in more advanced regions rather than a marked increase in the backward ones. This should be verified in all countries to get an idea of the trend in the situation.

From Community Bulletin No. 12 of December 1971 we quote the summary table on movement of the disparities for the years indicated:

Production per head
national average = 100)

Germany (FR)	(1957/66)	from 113.0 to 108.2
France	(1962/67)	„ 73.4 to 75.8 (income)
Italy	(1957/66)	„ 114.7 to 98.5
Belgium	(1957/66)	„ 49.1 to 53.3
Netherlands	(1960/65)	, 30.6 to 36.2

As already mentioned, in Italy the reduction in disparity is due to the slow increase in the more advanced regions whilst the index of poorer regions has remained unchanged.

The changes can be partly attributed to migration. In the German Federal Republic the more advanced regions have seen their index lowered whilst the less advanced ones have seen a definite improvement in their position.

In regrouping the regions inside each member country according to gross internal product we have seen that in France the disparity between regions with the lowest GIP and those with the highest GIP has widened due to the slow increase in the poorer regions.

The same occurrence (increase rate relatively inferior in less developed regions)

has been observed in Italy, but the increase in population in poorer regions has been slower and has, therefore, increased the development rate of the gross internal product more on the whole than in the more advanced regions.

These are the official figures on employment and income but, as is known, these do not tell the whole truth; there remains the information on hidden unemployment, under-employment, on persons who through lack of availability of employment remain outside the labour market; this situation is reflected in Italy by a very low rate of activity, 36.4% in 1968 which was then below the Community's average (38.8%) by 2.4 points. During recent years this rate has been reduced to reach a point below 36%.

If this information of the past is not encouraging, the estimates up to 1981 as shown in the Memorandum of the Italian Government to the Community are even less encouraging and positive. Projecting up to 1981 the trends for the period 1967-70 (a relatively fairly favourable period) the Italian Ministry of Labour reckons that in Italy in 1981 unemployment could reach a minimum of 2 200 000 and a maximum of 4 600 000.

These figures reflect the seriousness of the situation. In the Mezzogiorno alone unemployment could reach between 1 100 000 (low estimate) and 2 350 000 (high estimate). What these figures can mean in terms of increased disparity can be easily realized.

For these reasons we consider that the Italian Mezzogiorno due to the acuteness and dramatic aspects of the problem constitutes the nucleous of the whole strategy of regional development not only in Italy, not only because it is an Italian problem, but also because it is inside the Community and is thus a Community problem.

The limits within which the prepared strategies will show their worth in this typical case, *par excellence,* of underdevelopment inside the Community will show us how to tackle other problems of underdevelopment in other backward regions of Member Countries and of those about to join the Community.

With regard to past experience it must unfortunately be admitted that the Mezzogiorno of Italy constitutes the clearest proof of the invalidity of the formulation of the concept and of the complete failure of Italian and Community regional policy.

The limits within which the opportune lessons can be learnt from this painful experience may perhaps enable the Community and Italy to face in future the structural problems which, as we shall see soon, can place under discussion the whole character of the Community.

Outline of regional economic theory and international integration

In this part we shall not seek to devise or to develop our theory on economic and regional development nor shall we make a detailed analysis of all the proposed and applied theories.

We shall only consider, perhaps at the risk of being thought to be superficial and unorthodox, the theory which, to us, appears as the most suited to represent the economic phenomenon and to suggest instruments which are apt to overcome the grave situation of structural imbalance which can be noticed at national, Community and international levels.

The reasoning, even if it is frequently directed to regional policy and to development in the European Community with necessary adjustments, will also be valid beyond the case under study.

We start from the initial consideration that in its spontaneous growth, economic development gives rise to phenomena of territorial, sectoral, structural and other imbalances; the reasons why these occur in the first place can be many: different availability of natural resources, geographical location, climatic conditions, historical-cultural factors, different qualification of labour; the list could continue and take into account particular situations but this is not the aim.

We wish to point out right away that at a given time, in a given country, there is a given situation determined historically and practically and its analysis will show the most suitable measures for the pursuit of an economic policy.

Concerning the Community and Italian situations we have already seen the main characteristics of disparity between advanced and less advanced regions.

We believe that it is in the nature of the economic process to evolve according to a cumulative process in which the development of a given area attracts other growth factors through the so-called effect of polarisation which is normally opposed by that of diffusion; the growth of an area should have the incidental effect of growth in adjoining areas or regions.

The problem of disparities stems from the fact that normally the effects of polarisation or convergence exceed those of diffusion or centrifugal effects and, therefore, instead of decreasing, the disparity between regions becomes more pronounced.

Concentration in a given area of productive concerns should, from the point of view of the concerns, have the effect of realizing external economies not only through the location within that area of similar industries, but also of different ones; the concentration of concerns can avail itself of a whole set of auxiliary

services (maintenance and repair of machinery, etc.), of specialized labour which tends to flow where demand and, therefore, reward is higher.

We have said that this is valid for the contractor and, in general, it is also valid for the Community but not invariably so; up to a certain point the concentration allows the exploitation of a series of outside economies; after a certain stage, whilst the advantages to the contractor remain, there arises the problem of social cost of infrastructure which implies such a large amount of investments as to prevent productive and infrastructure investments in the other regions. A conflict thus arises between business and private expedient —and a social expedient—or utility which is normally overcome through public intervention.

It is true to say that the theory does not indicate exactly the limit of the above but it should be said that this limit cannot be found in an abstract way but in a practical one, by reference to well determined situations. In other words, it would be futile to seek the best size of a city, an area or a region; it is relatively easier to obtain rather clear ideas on what does not function in a given area, in a given region at a certain period of time.

We agree with Mr Ezra, our co-reporter, that there are at least two main reasons for justifying the action of public authorities, one of a social character and the other of economic character. The first concerns the necessity to use to its fullest extent the function of a collective utility i.e. of the whole population in less developed regions and, therefore, it is necessary to put in motion a process to improve the standard of living and the possibility of employment in this sector of the population. The second reason, of a narrower economic character is that, should it be decided to accept the state of imbalance with a high rate of unemployment and with infrastructures whose economic activities are in general decline in the under developed regions, the collectivity as a whole would suffer in terms of lack of development and revenue which could have been yielded with full use of the factors and which instead is not produced.

Where we are not in agreement with our co-reporter is the way in which he puts the question dealing with the decision to be reached on the basis of the dilemma: move labour where the possibilities of employment exist or alternatively, move or create employment possibilities where labour is available.

In our view the dilemma does not in fact exist where problems of regional development in the Community are concerned; it may be valid for regional development of a country which on the whole is in the early stages of industrialization when it is all the more necessary and opportune to exploit the graded and outside economies which we mentioned earlier and which lead to concentration of enterprises.

This dilemma loses its meaning in a country which has already reached an

advanced state of development but shows signs of the dualism mentioned. Where Italy is concerned the matter has been dealt with by Vera Lutz in a well known book but the author could not find support.

On the other hand, it is sufficient to consider the situation of high concentration existing in advanced regions to see a collapse of the alternative.

All the more reasons for the dilemma or the alternative to give way when one considers the question of regional development within the larger ambit of the Community and which would consist of the massive shift of millions of workers from one country to an other with almost insolvable problems

We would not wish, however to quote our co-reporter out of context; even if he mentions the alternative, he overcomes it immediately because whilst it can have a certain validity in some cases, as we have said, it does not in general stand up to the case of regional policy which we are examining.

We are again in agreement with our co-reporter when he states that there are at least two aspects to the problem requiring a decisive intervention on the part of public authorities; one is to have a development policy for the less advanced regions, the other is to fight congestion because of its social problems for the whole collectivity in the more developed regions.

On the other hand there is to be considered that the shift of workers only is not acceptable, mobility of capital can and must exist also for reasons of economic suitability and from the point of view of the collectivity.

It is a lack of acknowledgement of the invalidity of the supposition of classical economy relative to the shift of factors and types of market which cause incomprehensions or insufficient elaborations of economic policy.

Difficult as it is to acknowledge, yet it is always a free-trade concession to direct and classical origins which guides the economic policy of western countries despite the fact that sufficient progress has been made at least at theoretical level.

This detachment from, and delay in, the theory applied to reality has serious consequences which can be seen every day especially in the field of international economy.

At the level of national economic system, economic policies rely still on the assumption of a shift of goods and factors and it is not realised that in a way of dualist characteristics, already mentioned, which leads to a progressive concentration of capital, in reality the assumption loses its value and it must therefore be re-examined; it is a question of adopting the model so as to include or take into account the relative immobility of capital.

At international level one started, and still starts, from the assumption of immobility of labour and capital in order to demonstrate immediately how by removing frontiers customs and by admitting international commerce one reached an increased prosperity of the collectivity concerned and a specialization in production.

In this case also the insufficiency of the supposition is enormous; both factors move however with unbalancing effects because they are on a par with what occurs at national level; the movement of capital, instead of being directed towards underdeveloped regions encourages the integration of advanced regions between themselves to the exclusion of others and this is due to the fact that enterprises moving outside their national boundaries are usually the large monopolistic and oligopolistic groups oriented towards the exploitation of the market wherever it may exist.

In reality, mobility of labour at international level is not the movement conjectured by the classics and neo-classics but is a real and true emigration with all the costs we know, whether at the level of outside diseconomies in congested areas, or at the level of loss of factors and gradual impoverishment in zones of origin.

Beneath these conjectures relative to the conditions of factors are those relative to the type of the market. At present the influence of those who seek the free trade theory is clearly evident at the level of international economic integration theory. It is assumed that production occurs under conditions of perfect competition, something which is not found in the reality which is dominated by large oligopolistic groups and from this conjecture all the rest derives.

Regional policy in the main documents of the Community

A regional policy for the EEC (1969)

After the Conference on Regional Economies of 1961 and the pursuit of the tasks by experts, prolonged until 1964,[2] on 11th May 1965 a first communication was presented to the Council of Ministers on the subject.

In the meantime, at Community level, a Committee had been formed for *medium term economic policy*; it leaves out generic directions and creates an organism, at least formally, to examine problems of greater breadth than those

[2] The work by the experts has been summarised in a publication which anticipated in substance the official document; it contains a part dedicated to objective principles and means of regional policy and an other part consists of enclosures concerning regional policies in Member Countries. For further details, see *Regional Policy in the EEC*. Report by the group of experts, Brussels, July 1964. See p. 41 of the Report by the experts (1964); this is a point which has never been taken up again in subsequent documents and which constitutes the biggest gap in these, a real *Achilles heel* of the whole foundation.

of the conjectural policy which had maintained a prevalence. Thus, in the first medium term programme which concerns the years 1966-70 and which was approved on 21st April 1967 a chapter is dedicated to regional policy "in which the necessity is underlined of planning in this matter a set of institutional measures based on programmes covering several years, aiming at facilitating in particular the coordination of the means used by regional, national and Community institutions" (Document EEC 1969 p. 10).

The basic concept adopted is that of the first communication which revolves around (a) the creation of infrastructures and *general conditions for the location* of enterprises and (b) the creation of poles of growth. Regarding the proposals made by the experts an important step backward is noted in regard to *two points:*

(1) *Agriculture which, to the experts, seemed the sector to be directed towards* zones scantily populated assumes here at least the same importance as industry in general for all regions.

(2) Interventions in the industrial sector according to the indications contained in the First Programme on medium term are to be concentrated in poles of growth. The main difference with the views expressed by the experts is the abandonment of the correct statement underlining the importance of interventions in the processing industries and not only the basic ones in order to avoid, as they express it, creating "oasis in the desert" around which there is a complete void. But the most qualifying item in the statement by the experts is that of *simultaneity* of intervention for the creation of enterprises as a whole of infrastructures. In fact, past experience of twenty years of development policy for the Mezzogiorno in Italy shows that the creation of conditions for locating enterprises is not, *in itself, sufficient for industrialisation of* less developed regions.

Apart from the fact that a considerable infrastructure existed already in the Mezzogiorno of Italy, its improvement and its strengthening by themselves do not bring development, therefore to aim at infrastructure means in reality an unwillingness to face the problem.

The same argument is valid for the poles of development if the fundamental nucleus of these poles become—as has been the Italian case—basic industry, be it chemical or iron and steel.

"The process of production takes place in a closed circuit: supplies of raw materials extracted on the spot or imported, processing into one or several products through one or several successive phases, marketing and sale outside the region; thus it is possible, on a par with other conditions, that the added value in the region should be relatively limited."

It cannot be said that these tried and correct considerations were taken into

account in following documents. Nevertheless, the indications contained in the first programme on a medium term constitute, because they have been approved by the governments of Member Countries, the fundamental basis on which action can be build and intensified (Document EEC 1969, p. 10).

In view of the severe limits of origin it is not surprising if in the end the main emphasis of the document on regional policy is directed towards the problems of coordination of policies followed by Member Countries. In fact the consideration on availability of transport in the infrastructure in the vicinity of national boundaries, of industrial congestion in certain zones, and of the race in increases of incentives, push logically to a kind of coordinated policy in Community actions, but in substance they end by denying the deeper reasons and objectives of regional policy. This way of operating by regional and partial policy is limited in that it does not go to the core of imbalances between central and peripheric regions; it confronts the problem of waste of resources which in itself can be a real objective, it is not sufficient because it moves at the margin of an attitude on intervention which in itself is not apt to resolve the problem of regional imbalance.

This is confirmed in the document when defining the object of regional policy which would be established "by conditions of location of economic activities and of the population bearing in mind the requirements of technique, of the economy, the needs and aspirations of the population, also territorial characteristics." (Document on Regional Policy 1969 p. 22).

It is in appearance only that such a concept may seem advanced: in substance it reflects a conception of public intervention which in Italy was typical of the fifties, i.e. a public intervention based mainly, if not exclusively, on infrastructure policy.

The only difference is that the concept of infrastructure is no longer meant in its traditional and comprehensive sense, i.e. roads, sewerage, means of transport and communication, but in a much wider sense which embraces elements of a material and intellectual character.

Reference is made to all this equipment which makes possible the explanation of the multiplicity of material and spiritual functions of man in his habitat on the whole.

These include, therefore, not only the whole of the services which generally form part of the tertiary production, but also those which belong to the so called "quartenary", that is to say services of cultural, informative and creative characters.

Whilst noting a big step forward or, if one prefers, a real leap in quality as to the conception of infrastructures, it must, nevertheless, be asserted that all this

may be unrealistic; such a topic may become quite fancifully ambitious and abstract if it is not made simultaneously with that of direct interventions.

It is necessary here to take up again and not to abandon the topic of the experts regarding the necessity for simultaneous interventions in infrastructures (as widely as one wishes) and of productive activities.

Otherwise the topic of material and intellectual infrastructures *becomes in the* first place impossible and if, nonetheless it were possible, it would present serious dangers at the level of possibilities of developing directly productive activities not only in less developed regions but also in the so-called advanced ones.

Likewise, the discussions on the permanent nature of the objective of regional policy is abstract and unrealistic as is also the statement that it assumes or becomes a fundamental dimension of economic and social policy of public authorities (Document EEC, Regional Policy, 1969, p. 27).

The role of the latter in the following page, limits itself to furnishing a support "for the improvement in conditions of location" so that private initiative can fully develop its function of promotion and development".

This is derived explicitly from the kind of statement which inspired the Treaties notwithstanding the assertions made of idealistic enunciations in *recent times relative to the surmounting imbalances and to the expressed desire* to face the serious social problems of the Community and which inevitably ends by permeating the imposition of all the general and specific Community policies.

By limiting the task of public authorities at the stage of infrastructure preparedness, the role which these should play in the actual development is also limited in reality and private initiative is left with the task of overcoming imbalances and any function is denied to public enterprises and to State participation.

In these conditions it is essential that the assertions concerning the tasks of regional policy for solving the employment problems with a maximum participation of the population in order to obtain an economic optimum remain functional in the interests of monopolistic and oligopolistic groups which can thus decide whether and how to employ available labour, dispose of a mass of reserve labour in order to keep wages low. If, on the one hand, it is stated that the task of regional policy is also that of solving employment problems, but on the other hand there are no measures suitable for pursuing objectives the statement is contradictory. It is evidently not sufficient to assert that there is a necessity for training and retraining labour; this problem exists but there is also the one of creating vacancies which do not exist; nor is it sufficient to

employ labour on a temporary basis for the construction of infrastructures; it is necessary that it should have continuity and stability in employment.

Only thus can the topic become realistic and credible and the document also uses it concerning the necessity of re-qualifying the production process in the sense of producing new goods with a higher added value and technological content whilst it cannot be accepted if it refers, as it does, to the necessity of eliminating any form of industrial protection or when investment is made in order to keep structures rather than renew them.

To follow the latter course would mean in fact a worsening of the disparity between advanced and backward regions, it means ignoring the fact that in many of the backward regions there are no structures to maintain or transform, but the problem does exist of creating them from new.

Page 32 of same document on regional policy mentions that the disparity between "positive qualitative development and purely quantitative development is noticed by the under-employment of low rates of activities, by the existence of substantial transfers (tending to lessen the disparity between participation in production and participation in distribution of revenue), by occurrences of emigration, by periods of overheating, but on this consideration is made to depend the necessity of controlling transfers and therefore the request to relate it to productivity thus introducing implicitly the policy of wages income. One can deduce from such a gap that the adjustment of structures does not overcome imbalances as would seem logical but "limits transfers to a minimum". The waivering attitude in such a statement emerges clearly because "the voluntary character of location is not so large as to make it possible to do everything everywhere" (Document p. 33).

Whilst recognizing explicitly that the "progressive fulfilment of the Common Market tends therefore to increase in some cases the already excessive and prejudicial disparities of territorial distribution of production (p. 34) it insists, in a highly contradictory statement which affirms, on the one hand, that "the main objective or regional policy consists in the creation and administration of the localisation of sectoral activities" and at the same time makes the point "the success of sectoral policy and development policy in general, on the efficient achievement of objectives of regional policy" whilst on the other hand when dealing with sectoral policy, as we shall see in the case of industrial policy, it exhausts the subject of localisation by generally referring back to regional policy. It is therefore necessary that beyond the formal recognition of the importance of structural interventions at the level of sectoral policy—interventions which are the *conditio sine qua* and which cannot overcome the disparities between weak and strong points—notice be heeded of this necessity and the interventions and policies should not be fragmented as is the case at present; the criteria of certain sectoral policies should be re-examined but, above all, the concept that general economic policy is oriented regionally

should be applied in the reality and all consequences should be drawn from this assertion, relinquishing the limitative concept of objectives of regional policy. We give one single example of this sharp contradiction which is the most obvious one: it is the one relative to common agricultural policy.

In 1971, the overall budget of the Community rose to 3 055 million dollars of which 2 630 went to the EAGGF (European Agricultural Guidance and Guarantee Fund) or an amount equivalent to 86% of the total. Of this sum, which is really impressive relative to the situation of the Community funds, only 10% went to the Guidance section, there to be directed to the promotion of better productive structures in the sector. As for the rest, the funds went to maintain prices of produce with the disproportionate and disorted effects all are aware of.

We think it is necessary and urgent to reverse this state of affairs. The sign of this change will be seen in the necessity of examining again the criteria of the common agricultural policy. The moment has come to think about directing the main portion of interventions not to the support policy of agricultural prices but to structures in the industrial and agricultural sectors and, as concerns the revenue of the latter, change the criterium of intervention to more direct ones, more efficient and less liable to inequalities and abuses.

In this way only the Community can, on the one hand, begin to assume direct responsibilities for industrialization of less developed regions and, on the other hand, face the serious social problems of support of agricultural revenues.

Measures. The coherence and credibility of certain assertions find their verification through passing from the topic of objectives and tasks of the regional policy to that of measures and tasks of the Community. In our opinion, it is here that the reasoning becomes thin, it fades and is inconsistent, it undermines seriously the credibility of the Community's will to assume some role in regional policy.

As for the instruments on the whole, we believe there is a relinquishment and a way of thinking which require closer examination; mention is made of "investment expenses" in a casual way as regards professional formation and re-training and also equipment; however, the emphasis centres on the necessity of reaching more extensive rationality and avoid wastage, nothing is said about the volume which in certain sectors is either insufficient or, altogether, non-existent, the relation of capital-employment is mentioned but only to seek greater strictness in public expenditure on the part of Member Countries.

If such statement has a sense, it is for the current *portion of public expenditure* (as in the Italian case), but to state it with such indifference assumes a reactionary note. The problem is rather to examine a type of expenses written in capital account particularly as regards investments, the problem is that of

new instruments to control these, instruments apt to direct investments into labour-intensive sectors having a high value added content. On the requirements of such instruments however not a word is written in the document.

The fundamental contradiction reaches its terms when on page 52, in opposition to what is stated on page 54, it adopts the erroneous concept that structural disparities in social and economic sectors of Member Countries "will not be effectively removed until a single market is created inside the economic union." Evidently at this point what had been said earlier has been completely forgotten and not only in this regard! Recalling now the "imponderable factors" the possibility to appraise "the effective disparities between the various regions as regards conditions of location" is put in question! But we do not wish to insist on these aspects because we would enter into a weaker and indefinite field; we wish to make some comments on the question of the single market as a condition for overcoming the disparity in the structures. The above assertion means in reality taking back all that was said before, it means being unaware of the strong analogy between inter-regional and international development, it also means being unaware that, at national level, despite the single market, structural differences between the different regions instead of being reduced frequently increase through the "endogenous-cumulative" process which favours the more advanced regions. Otherwise stated, the automatic or spontaneous functioning of the economic system stimulates disparities and does not reduce them. Public intervention starts at this point (as seen in the same document particularly in the form of transfers, etc.) but evidently it is insufficient at national level and, anyhow, it is there to influence demand. The situation is more serious at interregional level due to the non-existence, except in an embryonic form, of the measures which exist at national level; the danger is therefore greater.

Industrial and regional policies (1970)

The limits in the concept of regional policy seem clear if one refers to the industrial policy of the Community, now being formulated.[3]

There are five points of reference in the document:

(1) Completion of the single market;
(2) Unification of the juridical, fiscal and financial framework;
(3) Re-structuring of enterprises;
(4) Organisation of alterations and adjustments;
(5) Extension of Community solidarity in relations with Third Countries (Memorandum p. 15).

As can be seen, any discussion on localization of enterprises and, therefore, of regional dimension of the problem is excluded. On the other hand the in-

[3] See: *Industrial policy of the Community*. Memorandum by the Commission to the Council, Brussels, 1970.

dependence and separation of the topics emerge clearly, for instance on page 26 of the document mentioned when not only does it choose prejudicially in favour of professional and geographical mobility, but also it expresses a clearly negative opinion on direct forms of aid for industry.

"Independently of the objectives proposed for social and regional policies, from the point of view of industrial policy, it is of utmost importance that professional mobility be encouraged and, within a certain measure, geographical mobility of labour. Aid to labour mobility in its various forms (professional formation, indemnity for loss of wages, removal indemnity, housing indemnity) is frequently an indirect form of aid to industry, more intelligent than the larger part of direct aids too easily diverted from their objective and leading easily to always new requests." (Memorandum p. 26).

It is evident that beneath such reasoning is the assumption that present industrial production organization does not present problems of sectoral and territorial concentrations and that everything is running as smoothly as possible. In the whole document are to be found very vague allusions to regional policy, the importance of which is indicated in an indefinite way, and to the need of a better coordination.

Regional policy is not considered as an overall dimension which covers and permeates all sectoral policies but it exists as a complementary function to the industrial one and "can also contribute, thanks to intelligent selections, to accomplish a better geographical balance of industrial development, reducing eventual excesses which its search for efficacy could involve" (Memorandum, p. 102).

The assumption beneath this is the same as before, that of synchronized development, an assumption which, as is known by all, bears no comparison whatever either with the reality of facts or with theoretical assumptions on the working of markets and development of economic systems and which in any case are excluded by the same Treaties which have provided for a whole series of recalls against obstacles and imbalances which may compromise the process of economic integration.

In the appropriate paragraph of Chapter 1 of Part Three, social and regional measures are expressly mentioned again. The first of these are reduced to the fundamental question, but not the only one, of professional qualification whilst the second deals with simple questions of coordination and the obvious need of aid or incentive measures of regional character. (Memorandum pp. 218-220).

Whilst acknowledging the importance of regional measures these are in fact only related to industrial transformations in advanced and developed regions. The question occurs immediately: which industrial transformations are being dealt with in under-developed regions when in some of these there is no industry at all?

In its statement of principles directed to rationalization of that which exists already the document, in dealing with industrial policy, does not lay down the problem of industrialization of less advanced regions and insists on the erroneous concept of the creation of infrastructures even if defined in a wide sense, i.e. inclusive of material and intellectual infrastructures and financial aid grants for which coordination, limitation and discipline are desired to avoid forms of competition between various states or regions and which in the past has meant and still means today a considerable waste of resources. The opportune common doctrine on regional industrial policy would still consist of coordination of initiatives so as to avoid investments to be made in sectors which at community level have reached a point of saturation or in sectors which, in general, do not offer good prospects of development.

In this report our task has been limited, in accordance with the agreements, to analyse the reasons why capital is not transferred to under-developed regions, therefore, we have tried to see in the document on industrial policy first of all the parts which are concerned with aspects of regional policy.

Industrial policy is, nevertheless, too important a problem for workers and society and, therefore, we cannot do otherwise than express a few brief considerations on some of its aspects.

This document, in fact, whilst associating itself with qualitative aspects and the type of industrial development to be proposed to European society does not deal with the problem—this also goes for other problems—but limits itself to a general reference to other documents which are not there and which we shall probably never see.

The consequence of this is that the finalization of industrial development tied to the logic of private profit, with all the contradictions and incongruities which go with it, is in the end clearly accepted.

The proof of this is that, on the whole, problems relative to questions such as: what to produce, how and for whom to produce, and conditions of workers in the factory, etc. are not even taken into consideration.

It is not sufficient, in fact, to say that goods with a higher technological content must be produced if we have not first made clear for whom these goods are produced and what purpose they serve.

Not to deal with these problems signifies a belief in the capacity on the part of the market to solve them all; this is certainly not the case and is contrary to the requirement expressed by the Community that a document be drawn up on industrial policy.

In Italy, at national level, the syndicates, in unison, have placed on record in a

document on economic and social situations,[4] the three pillars upon which rest their comprehensive strategy:

(a) full employment and development of Mezzogiorno;
(b) social reforms (i.e. higher standard of living and human progress for the working classes);
(c) better conditions for workers in factories.

This means tackling on the one hand, the sharp disparity between North and South to allow participation in the productive process of large strata of the population still on the outside and on the other hand, adopt a series of reforms like those of schools, health, transport, pensions, which weigh heavily on the standard of living of workers.

This involves, at least where Italy is concerned, the necessity and urgency, *which cannot be put off, of establishing priorities* between a series of possibilities given the available resources; these priorities, in our view must go towards the development of social services, sacrificing a portion of private *consumer goods on which industrial development has been mainly based during* the last two decades.

It is necessary, therefore, to reconsider the overall demand and give preference to social services whilst limiting consumer and capital goods.

The question concerning what to produce assumes importance also from the point of view of relations between the communities and Third Countries, especially those on their way towards development.

It is not here a question of expressing a general disposition establishing commercial relations with all countries—this is not sufficient—we are all aware of the serious obstacles interfering with the development of currency exchanges between rich and poor countries *(deterioration in exchange, scarcity of international* liquidity, exchange instability, etc.), it is necessary to move forward and see first of all together with these countries what kind of goods they require most, to create the conditions for credit *facilities, finance, character,* etc. which are required to ease exchanges with them.

This implies also the acceptance of only few large enterprises of neo-colonialist type which, as in the past, continue the exploitation and deterioration of natural resources or the exploitation of market potential which emerges in these countries. Thus, one cannot accept the standpoint of the Memorandum generally in favour of amalgamations and concentrations because it would mean accepting the road leading towards a generalized situation of oligopolistic competition between the largest concerns which are for ever seeking wider markets to exploit. Nor can one accept the idea of oligopolistic group or multi-

[4] *Document CGIL, CISL, UIL* of 6th October 1971.

onal enterprises with a European sign-board to oppose to oligopolies and inationals with an American sign-board.

reat separately the social aspects of amalgamation and concentration s to us to be an insufficient and useless choice. The project, unspecified, of n on individual guarantees for workers dependent on firms which are on oint of amalgamation or concentration or of coming under the control of s, is but a formal guarantee and is not sufficient if it is not incorporated e actual contract of employment in the countries in question and in the munity.

out control of, and prior vigilant examination by public institutions on ffects of amalgamation or concentration, without the control of workers the challenge of an anti-monopolistic community policy, the attitude rally favourable to amalgamation and concentration is translated, in reali- an attitude of real and fitting support for the interests of oligopolistic ps to the harm of small and medium size enterprises thus made to bear ncreasing domination and damage to collectivity and consumer.

ner plan on economic and monetary union

tions of structural and regional policies come also on the scene in regard e latest initiative by the Community on economic and monetary union. are dealing with this document because we believe that in this field, at at the level of statement, certain Community problems which hitherto been omitted either through inaction or through lack of courage, are now nning to be open to discussion.

ing from the correct premise that "the realization of an overall economic ice" can be compromised by structural disparities, the document asserts cooperation in structural policy in the various sectors "will contribute" vercome these obstacles; however, these policies "cannot come under the sive authority of national budgets" and, therefore, they will also have to ealt with at Community level.

ese assertions show that at Community level there is an awareness of in problems they become dangerous if, in the light of what has been said e concerning the documents on regional and industrial policies, the Com- ty's competence should be limited to a coordinating and controlling role e various sectoral policies, if it should be limited to making clear and ronizing the promotional intervention policies as has been understood by Community hitherto.

known, Werner's report is the most ambitious document presented re- y by the Community institutions; its scope is the building up in succes-

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sive stages of an economic and monetary union to be achieved through the gradual centralization of monetary policies and budgets. In other words, the management of liquidity, the creation of a monetary base policy in the face of outside countries, the essential data of national public budgets (level, balances, and method of finance) should be decided at Community level. The corollary of these general and convincing principles should be that structural and regional policies would also come under the authority of the Community.

It does not appear that the Community institutions are quite clear about the politico-institutional implications of such a theme if they limit themselves to the supposition of a modification in the Rome treaties.

At the moment we are not interested in dealing with this complex and delicate problem; in any case we think that we can state that the topic taken up in the report is a "future refuge", a topic with no possible chances of realization without a precautionary or, at least, contested democratization of the Community structure and without an effective and incisive participation of the working masses in its functioning.

Because of these reasons we believe that all or almost all the premises and presuppositions for such an ambitious scheme are missing, even if it can be realized in successive stages.

In this connection it is necessary to state that whilst the Werner Plan proposes the centralization of decisions on monetary policy, it does not appear to go beyond a certain coordination of budget policies. We make this remark to show that even in the event of a Community policy to tackle seriously regional and structural policies, there would be no premises even with the fulfilment of the Plan. In fact, the realization of the Plan would not allow (in its present form) for a policy of direct structural intervention on the part of the Community and, if this is so, then the problems of regional imbalances cannot be dealt with.

This becomes evident if one reflects a moment on the nature of these imbalances which can have different origins: exogenous or endogenous or both. In either case a region or country achieves higher rates of development through an increase in outside or foreign demand or because of an initial advantage due to expansion of one or several key sectors which give the region a higher accumulation rate, a higher level of investments and higher productive rates. In its turn, higher productivity results in larger profits (more internal savings) and increased exports (more foreign saving). If this saving is used efficiently a cumulative process results which tends to enlarge spontaneously the disparity between one region or country and the other. We have already commented on the inadequacy of the policy on transfers of resources at national level. At Community, international or inter-regional levels the problem is aggravated either because transfers, when they do exist, are minimal or

trend is limited to real and fitting monetary measures which would give a greater relief to the already strong prevalence of trade aspects and do not extend to the perfection of a series of measures on budgetary policy which permit substantial transfers of resources from the more advanced regions to those which are less favoured. This means to devise a policy of public withdrawals and expenses at Community level; this is not dealt with in Werner's report and it seems that the propositions do not exist.

Hypothesis for a regional policy of rebalanced development

The failure of the twenty year policy in infrastructures which was applied in Italy, *the marked insufficiency of the policy itself* on incentives-deterrents even when it is stated that incentives must be "selective" as in the preliminary programme for 1971-75 (Italy), shows that other means must be found for a solution. The same considerations—or similar ones—can be given for other countries of the EEC or those close to it as for instance the United Kingdom where, whilst having characteristics different from those of Italy, the infrastructures and incentive policies have not solved the problem of industrialization of under-developed regions. Moreover, one can see how the localization of industries in regions lacking adequate infrastructures occurs regularly, for instance in countries being developed or those of Eastern Europe, and is therefore determined by definite market interests which evidently do not exist for private capital in the depressed regions of the EEC or Western Europe.

The solution can only be found in a fundamental action on the structures and on the mechanisms of accumulation and investment acting as a lever on public industry through institutional interventions in depressed areas, interventions endowed with a dynamic capacity for the selection of new sectors and new courses of development.

It is necessary to devise an overall strategy of development with pragmatic selections and coherent instruments, with the definite intention of reversing the imbalance in progress by fighting its structural roots.

The search for the practical stages of such strategy cannot but start from some preliminary considerations. The Italian Mezzogiorno constitutes the clearest manifestation and the vital point of the whole mechanism of national and Community imbalances. It constitutes therefore the place of attack and in this way it becomes the lever of a regional, national and Community policy and, thus, of an industrial and development policy intent on overthrowing factually the tendencies now to be seen. The attack against the prevailing conditions in the Mezzogiorno is a fulcrum and a lever for a national and Community policy of rebalance and must become an integral part of an industrial policy and of public intervention in the major selections of key sectors, aiming at a new direction in development so that the industrialization

The topic of agricultural industrialization is linked to the other main reform, that of enterprises with State participation and, in the background, of the function of public industry and with the objective of a new national and Community trend for the industrial apparatus and its restructurisation for a new kind of development. The function of business enterprises with state participation at Community level becomes possible and necessary by the increasing weight of public intervention in the economy and because in numerous countries there subsists a public industry, expanding in some cases.

From a qualitative point of view enterprises with State participation do not enforce a productive policy in contrast to present trends with mechanisms of accumulation and investment which govern these; instead, they constitute a unity and a functional opportunity subordinate to the control of large private capital.

In this compass has occurred the concentration of activities by public industries in the production of basic products for which they have ceased their anti-monopolistic role both as to prices and trends, this has happened notoriously in Italy with the giving up by ENI of a share in fertilizers in contrast to Montecatini and the IRI-FIAT agreement on steel products; on the other hand they have used vast amounts of public resources in production with a high investment cost and low rate of added value so as to place them at the disposal of a productive process hinging on durable consumer goods, a closed preserve of private capital which can draw from it higher medium term profits, a more intensive plundering of revenue in the national market, greater competitive strength in an international splitting up of labour in the petro-chemical sector and of undertakings similar to those IRI recently established in some countries.

The role and the weight of public industry is, on the other hand, essential to shift the axis of production from durable consumer goods to those, besides those of primary consumption, to implements and those having a high technological content, in a better balanced relationship. This shift to production of implements, to plant installations and to "propulsive technology", if it has a maximum significance at national level where it must find organised outlets, requires also a complementary Community direction which favours the national process at a uniform rate of expansion.

It is in the interest of the depressed areas of the Italian North-centre and those of other European countries not to repeat the failure of the Mezzogiorno with its policy of incentives, of infrastructures, of "poles" and "oasis in the desert" but to carry out a general re-structurization of the industrial apparatus in the way already mentioned, so as to give to the industrialization of the Mezzogiorno and to agriculture a lever and essential impetus which flows back of its own in the area in question. For the course proposed to take its full effect it is necessary that the new industrial initiatives in the Mezzogiorno and other

depressed zones look either to commodities with large size plant and l
gree of technology, or to manufacturing activities allied, above all, to
tions in the strategic sectors. It is necessary for new major initiative
clude in their programmes the setting up around them of "integrated
tion systems" through which verticalization and ramification of activ
achieved, derived and induced by these initiatives and simultaneously
sification with collateral initiatives. Such "systems" must bring their
to the "plans of zones" for agricultural transformations. That this is t
way is demonstrated by failure of the attempts made in other directi
the "Apulia pole of development" devised with much care by the E
which failed through the absence of a nerve centre and of clear arran
in sectoral community policies.

The actions by undertakings with State participation supported by t
course and by a scheme of re-balancing, are linked with the role th
develop for the imposition and fulfilment of sectoral policies which
such course.

The actions of sectoral policies lead to a single view of all developmen
in industrialized or depressed areas.

Within these limits the problems of control of capital and trends in inve
of large private companies are set to channel their investments not
sectors in difficulty and in depressed regions but also in sectors and
with a high level of investment and employment, and towards the new
of development and related process of industrial restructurization and l
tion. The question arises, therefore, of a public intervention in the p
companies; this intervention must be decisive in the various sectors s
determine the sectoral development programmes, enrolling these in new
trends of which public industry constitutes the nerve centre.

Industrial restructurization of implements, plants and "propulsive tech
must give the European community an industrial apparatus which is
and functional for an economic commercial relation with the areas ple
or engaged in an accelerated industrialization: socialist countries and c
being developed. Industrialization of the Mezzogiorno, of agricultu
of other depressed regions of the Community also forms part of
structurization.

We have now to deal with the part relative to the various measures
struments which can and must be put into effect but only assume their
cance if they are finalized and chanelled on general lines of "key instru
of sectoral policy and the action by enterprises with State participati
gaged in a different development and in a rebalancing action and there
strategic and propulsive industrial localization in the Mezzogiorno in th
indicated.

New and more adequate instruments for an EEC regional policy

We have seen in the brief theoretical exposition how it is impossible to end at Customs Union or at the limits of the Common Market the actions resulting from the reasoning of oligopolies or multinational enterprises. The enlargement of the EEC in reality tends to aggravate the dangers in the measure in which the Community could acquire the character of a sort of free trade area.

We have previously examined the fundamental general lines of the Community documents, the insufficiency and partiality of the instruments proposed and which accepted the reasoning of private profit, for the exploitation of workers and which are not apt at all to oppose a spontaneous development of the system.

We have also said that the statement on the decision reached by the Council in connection with Werner's project for Economic and Monetary Union is insufficient and contradictory.

We now say that to continue with this project until the anticipated aims are reached would mean in reality a monetary union only and not an economic one.

The latter is characterised by the same elements which characterise the economy of an autonomous and independent nation except for the true political elements which immediately follow on.

If this is true, then the qualification of Monetary Union is no longer a superfluous term but rather the fundamental characteristic. If Werner's project is so, it shapes like a lame man with one leg developed but damaged and not fully efficient (monetary policy) and one leg not even at the embryonic stage of development (budget policy). If we consider the typical difficulty and rigidity of budget policy at national level and if we consider the insufficiency of monetary policy in order to promote a revival and development, always at national level even more so at Community level, one is seeking to set up a mechanism which actually cannot function very far. The idea of creating a single currency is the fruit of a monetary illusion of the same kind as the illusion one wishes to give to the working masses and to Europeans in general.

Conceived in this way the Monetary Union can be of some use to Governors of the European Central Banks who will be able to increase their influence in the International Monetary Fund, but it will give advantages neither to workers nor to the Governments of member countries which, on the contrary, can see a substantial reduction in their ability to control and support the overall demand already sufficiently restricted.

The corollary to Werner's proposal of creating a single market of capital

without control nor discipline appears to us as irresponsible and extremely dangerous; it would mean meeting the interests of International finance groups and allowing them to plunder savings wherever they are without taking into account the implications of the monetary and financial policies of member countries.

Having considered the reality of the situation we think that it is unnecessary to dwell any longer on the problems of the economic union and therefore we shall now deal with the instruments as they could and should be with present institutional guarantees or after marginal alternations.

We start with the question of coordination and obviousness of the complex systems of direct aid to enterprises for industrial and regional development; at first sight it could be thought that the Community's initiative in this matter is entirely positive and well deserving but this is not so; even if there are positive aspects—and we do not wish to deny that there are some—there are also negative and dangerous ones. Actually the proposal of the Community up to now is really not clear and it is necessary therefore to elucidate the equivocal elements.

Above all it must be made clear that a proposal of coordination and transparency cannot be intended in the sense of placing all regions or areas (zones) on the same level. It is therefore necessary that the subdivision of the Community surface in one hundred or more regions shall not stop here; regions should be classified according to types which are clearly and well defined for the purpose of regional policy.

We think that it is worthwhile to consider carefully the British experience on regional matters which Mr Ezra describes in his report with much clarity.

Regions in Great Britain are classified according to three main categories: intermediate areas or regions, areas of development and areas of special development. Mr Ezra in referring to proposals made in England suggests that the possibility be considered of sub-dividing the Community regions according to four types of areas, i.e. development areas, intermediate areas, neutral areas (normal) and congested areas.

Aid policy having been made clear and coordinated, it should take into account the need to graduate and differentiate aids according to type as proposed above.

To place all areas at a same level according to a rough and simple sub-division between developed and backward areas and then ask why capital does not flow towards less developed regions is an absurdity; it is also a matter of putting a question which can result in an extremely simple and obvious answer: under such conditions it does not suit the private contractor to undertake

a productive activity in backward regions, at a higher cost of the operation, because of greater uncertainty, due to the further distance of the goods and therefore higher transport costs, the isolation that the introduction in an underdeveloped area implies and for a series of imponderables, amongst which are those related to a different social-cultural sphere.

We do not wish to make a very analytical and profound statement on the various *types of regional policy measures, as far as we know.* This has been brilliantly done by Mr Ezra and therefore we refer to his report for a closer examination.

It seems opportune to emphasize that if the Community wants a policy on localisation it must not stop at the general statement but must go beyond; the Community and Member States can and must avail themselves of the direct and indirect instruments of localisation policy, of instruments of quantitative and qualitative type.

The *pre-eminent qualitative instrument is the grant of authorisation* which has been successfully adopted in Great Britain. It allows control of investments in an intelligent way and in a way which is not costly; the authorisation remains the most significant direct instrument. No less important obviously are all the other instruments of quantitative type, such as, on the one hand, fiscal exemptions, subsidies, credit participations, interest allowances, sharing in the sunk capital, etc. or, on the other hand, deterrents or differential taxation rates.

Neither in this respect shall we dwell on details, the various instruments adopted by member and associated countries are listed and analysed in many documents, also in Community ones

A second requirement for grades and differentiation should be mentioned, not *this time in relation to the type of aere or region* where it is proposed to localise investments, but *in relation to the type of investment itself,* its characteristics in regard to employment and to the technological content of he productive plant.

A more serious effort for the effective control of investments can only be made in this way, control which, with facts and not only words, should bring or at least make easier the *investments in less advanced areas,* also of investments which are labour-intensive and with a high technological contents.

Should Community legislation in this matter become uniform and coherent with the objectives which, we are told, it is desired to pursue, then the dangers of escape of capital from one country to an other could become remote. It is on this topic of coordination that the Community should act in our opinion.

This type of action presupposes a decisive and collateral intervention for a *series of synchronizing measures* on fiscal regulations of member countries as

to the treatment of revenue from capital and taxation on companies. It presupposes moreover an adequate pressure on certain nearby countries with so called "fiscal heavens".

Public enterprises

It is with the public enterprises and enterprises with State participation however that public authorities can play a leading role in regional development policy. For this instrument a new approach is however required; the course must be changed so as not to continue, as in the past, an action which is in line with spontaneous development of the system with an action answering purely to business criteria. It is evident that a situation in which private companies concentrate normally in the more developed zones, public business with a state participation can play a leading role in reversing this tendency and in producing conditions of localisation also for private companies.

Public enterprises can and must be at the centre of the so called integrated development projects in an attitude which can no longer be that of subordination to the large private interests of oligopolies but with its own function and initiative, not only in the basic sectors but also in the processing ones with higher employment prospects.

It is only through entering into the processing industry that public enterprises can acquire the benefits of heavy investments in basic sectors, benefits which will otherwise be taken by private industry; only thus have they the possibility of adopting a policy of alternative prices and of controlling decisions in the matter by private oligopolies.

Turning once again to the specific role of the Community and the necessity that it should dispose of efficient and adequate instruments, we shall consider briefly the Report on Financial Means utiliseable for purposes of regional development which in 1970 followed the General Report on Regional Policy.[5]

This report takes up the various measures which can be adopted on the basis of the rules of the actual Treaties however, contrary to expectations of some hopeful individual, no steps are taken beyond the analysis of the present means for applying the measures; some brief remark is made on the possibility of improving their use but without expressing the least critical opinion as to how these means had been misused in the past.

We are indeed surprised that enormous expenses continue to be scheduled of the EAGGF; for the Guarantee section it is estimated that from 1971 to 1975 about 2 933 million u.a. out of a total of 5 708 million will be made available without any possibility of using such a sum for regional purposes. In fact being directed towards guaranteeing certain levels of prices of some agri-

[5] See *document SEC (70) 4377*. 2-12-1970.

cultural produce, the differentiation according to regional needs is *difficult to* understand and would anyhow be contrary in principle to Community thinking.

On the contrary, a differentiation could easily be realised if it were decided to use direct forms of integration of revenue.

In any case it is the Guidance section which best lends itself to regional policy action and it is here that one should look for direct intervention on production structures.

We have said that for 1971-75 it was estimated that the Guidance section should use almost half the expenses on interventions of structural character; we consider that such a percentage must increase if agriculture is not to remain for ever a marginal sector and assisted activity, and if it is to become an activity economically valid.

As to industry, interventions should be extended according to Art. 54 and 56 of the ESCS to all sectors which are in need of assistance; the limits placed on steel centers and to conversion operations must be raised

In this respect the proposal made somewhere of setting up a European finance society for interventions in the industrial and manufacturing sectors should be considered; this society could find the necessary connections with national or regional finance societies by means of participations which would consist of a subdivision between more corporations of the risks involved.

It is clear that the instruments of intervention for the reconversion and for the support of sectors in difficulty can easily be graded and differentiated for purposes of regional policy and employment. Little can we say on the action of the European investment Bank whose means naturally are increased and used for financing individual projects and, better still, for financing integrated projects of development in the sphere of "plans of zones".

It is with this last instrument in fact that it is possible to evaluate better the inter-dependence and necessity of investment in a particular area, acting preventively so as to avoid isolated investments in the base sector around which there is vacuum.

The "plan of zone"—as also regional and national plans—must be above all the instruments around which is realised the participation of social forces and of workers in decision making in the economic and social field.

It must be an effective instrument of democracy and self-determination through which local populations genuinely express their own interests and in a political build-up adopt the means of carrying them out. It must, therefore, be an instrument of emancipation and advancement of the working classes and, no less,

an instrument for the execution of precise decisions taken centrally at national and/or Community level.

In this sense, our institutional scheme presupposes the full realisation of regional reform with an effective handing over of powers to the regions and to the other local corporations, to each one according to its competence.

The European Social Fund is a separate topic; its duration was initially expected to be only that of a transition period. The necessity to keep this organisation going and to invest it with new responsibilities has been acknowledged; the ESC and other centres have had long sessions and some kind of understanding has been reached for the reform; a project for a new Statute has been prepared by the Commission but the policy decision is still missing to this day; we are in favour of getting over this situation of paralysis; we are also in favour of its utilisation for purposes of regional policy and the use of the means which are provided for in the interventions of type (a) and (b). The same view holds good for proposals contained in the last document of the Commission relative to "actions by the Commission cn regional policy in agricultural priority regions of the Community".[6]

Whilst considering that, on the whole, the proposal made by the European Interest Discount Fund for regional development is insufficient and incoherent in respect of the pre-established aims, we think that should this proposal be re-examined and amended according to the indications we have given previously, it may find its own place in the ambit of specific instruments of regional policy of the Community.

In addition to the Discount Fund enumerated above the proposal foresees a series of interventions for structures which we think is a move in the right direction but, unfortunately, it must be noted that also this proposal—it foresees a principle of aid graduation and differentiation in aid in accordance with what we have said earlier—remains as it stands and no policy decision has been reached over it.

The assumption of policy responsibility by national and Community institutions, in this connection, is particularly urgent and necessary if the impoverishment of these regions, still mainly agricultural, is not to persist irreparably. Thus, we have seen even if only briefly, the principal means the Community disposes of or could dispose of with only marginal modifications. We remain convinced that they are insufficient and basically weak especially if they are left as they stand; a few exist but are useable in an inefficient and harmful manner (see instruments for support of agricultural prices), others exist only at the stage of proposal; all however are made use of or are capable of being made use of in a subordinate attitude. It is, therefore, necessary to get away

6) See *Community Document 1971 500 def.* of 26/5/1971

from this situation, to abandon assumptions *of geographical mobility of* workers and of regional policy directed exclusively to the realisation of infrastructures and to assume the responsibility and the initiatives which are necessary in *order to get out of the paralysis in which the Community finds itself.*

Trade union policy in the present situation

Considerations which have *been developed in the report* so far propose a policy of balanced regional development of the Community countries and of the whole Community itself.

Such kind of development requires a change from the present spontaneous functioning of the economic mechanism at national and international levels, through the control and orientation of productive investments in under-developed or congested zones.

A regional development policy must be coordinated with an industrial policy of sectoral development and of its localisations, it cannot base itself exclusively on incentive or infrastructure policies but must boil down to direct productive intervention which involves the fundamental role of public enterprises and public authorities at the various regional, national and Community levels on *the grounds of principle that capital must be transferred where the labour force* exists and not the other way round.

It is on this basis that the objectives of social policy can be reached, particularly as regards employment problems, civilized living conditions for workers and for the population of all regions.

Social policy must no longer be the consequence of the selections and trends of economic policy but, on the contrary, it must be the condition of a new economic policy the objective of which is to overcome imbalances, secure full employment and higher living standards starting from more humane conditions of work.

Such a strategy of economic and social policy requires a strongly binding participation from the labour force and of *trade-union organisations in* particular in order to impose through struggle and bargaining new selections of economic policies on the public authorities and to counter-balance the increasing weight of oligopolistic groups in *national Community life.*

Whilst the process of economic integration evolves between countries of the Community, even amidst difficulties and sharp contradictions, whilst there is an enlargement in the process of restructurisation and concentration of enterprises and whilst powerful multinational companies emerge, the decisions of which leave out of account any interest of the national collectivities in which

they operate, the trade-union movement finds itself today in a condition of almost complete impotence in the face of such occurrences and it loses thus at Community level the power acquired at national level.

The trade-union is one of the fundamental instruments for exerting an adequate pressure of renewed forces and to press forward, at national and Community levels, a new economic policy based on a change in relations of strength and therefore in relations of power with the ownerships at business as well as mankind levels and to agree to control and to contest the present policy of investments.

The present want of unity in trade-union movements and the absence of a unitary international strategy on the part of syndicates in the trade-union movement in the EEC and in West European countries is one of the essential reasons for action in order to achieve a real change in present reasoning on economic development of the Community.

It is thus essential that the trade-union movement should have its own strategy of revendication over economic and social policies, it should also have an international dimension and coordination based on the contest of the principle of enterprise efficiency and productivity motivated by private profit so as to impose a larger concept of social productivity; it should take the burden of national and international problems of the collectivity. Such a strategy must assume the fundamental objective of public control of capital and investments (public companies, private ones and in particular the multinationals), of their orientation and localisations in accordance with an economic policy of industrial, sectoral and regional development particularly related to structural transformation of agriculture.

Consistent with the objectives of economic policy, the formulation of a coordinated syndical policy at Community level is essential. It should have at its centre the control of work organisms so as to guarantee humane conditions of work (problems of movement, of institutions, of qualifications), the control of the labour market, the harmonization of providential policies both as regards distributions and the system of financing, wage and contract policies (the refusal of restrictive wage policies, of zone and sex differentiation, wage parity between workers and employees, etc.), and the duration of work (pensionable age, weekly hours).

Directly connected with the programmes of trade-union revendications and the need for a new development policy are the problems of emigrations used to weaken the contractual power of workers in the more industrialised countries (to the point where emigration from countries outside the Community is encouraged in order to avoid EEC regulations on wage parity) whilst there is an enormous exploitation of huge masses of workers coming from under-developed regions and countries. The more acute consequences of the present develop-

ment mechanism fall on these workers in the form of lower wages, degrading conditions of living and of work, unemployment which hits them first in the phases of an economic recession such as the one occurring at present.

Moreover, trade unions must harmonise their attitudes to problems of social reforms and the raising of living standards (problems of homes and urbanisation, transports, schools, health and pollution).

Against this background the gain and defence of more extensive trade-union rights acquires an increasing importance in places of work and the recognition, not only at national level, but also at Community level, of the role and function of the trade unions which vindicate the value of their opinions not only as regards problems of social policy but also the choice of economic policy and the constant safeguard in all centres of their full autonomy of initiative.

The democratization of Community institutions—the most important political problem of the EEC—to allow a real possibility of participation by workers and the people in formulating and accomplishing new economic and social policies, also goes for the establishment of a new kind of relation between those EEC institutions and syndical organisations, acknowledging their role and function which must be exercised for the protection of workers and for the democratic transformation of economic structures in the different countries and in the Community as a whole.

Trade-union autonomous action is the direct expression of the real needs of workers and becomes thus the essential factor in a policy of balanced regional and sectoral economic development through the full utilization of all resources, not only material ones but above all the human ones.

THE PRE-REQUISITES FOR AN INCREASE IN INVESTMENTS BY EEC ENTERPRISES IN THE LESS DEVELOPED REGIONS OF THE COMMUNITY(*)

G. KIENBAUM

Taking stock

In Germany an opinion poll has disclosed that 80% of the population think, that the development of different parts of a country must be aligned with the interest of the whole. However in our operating economic systems the setting out of regional policy is giving rise to problems. For the corporate image of the market economy—all six Member States and also the four newcomers to the EEC are basically market oriented national economies—the only really adequate policy measures are those, which can be considered as congruent with the market and which in the same way promote or handicap the whole. This principle will certainly be partly contravened in regional policy in all Member States, for state interventions apply to sectors and particular economic items.

All the same, regional policy is one of the essential constituents of a market economy pattern, because our economy cannot prevent generating from within itself areas of varied economic strength, and the disparities grow. Every imbalance will have its effects on the development and growth of the whole national economy. To the institutions of the public authorities falls the task of ensuring in all regions the provision for all citizens of the vitally necessary and standard products and services and also taking over the guarantee of an income for those earning a living. It then remains for these expert bodies to install a panel of instruments, which does not contradict the playing rules of our economic system.

To begin with, such an assignment for the body of experts shuts out for practical purposes any possibility of a passive rehabilitation of particular regions.

Development aid in one's own country may become popular again. In German economic circles there was never such a readiness before to relocate production premises or seek new sites. The point of departure for a systematic regional policy thus seems not unfavourable. An overall demand for locations is face to face with a widespread supply. It will be the task of the public authorities to set up a rational platform for the "partners" to meet. This situation arises equally from the municipal to the EEC level. On what scale authority will be delegated is reserved for future discussion.

(*) Translated from the German

Both industry and public authorities can gain in this undertaking. The economy is groaning under mounting cost burdens in the conurbations and is seeking a way out, which offers the best conditions—the public authorities are trying to decentralize the conurbations in order to bring down the inevitably escalating social costs there. This task is eased by the fact that we are all living in more or less growing national economies. Economic growth makes it possible to bring about a levelling out without impairing or prejudicing the economic strength of other regions, as would happen in a stagnating economy. Economic growth, however masks in itself the latent danger of intensifying already existing disparities. This would appear to outline the point of departure situation. Industry and public authorities are equally agents of supply and demand and there is an ambivalent relationship between them. The problems of regional policy are not a case for an institutional levelling mania but rather for a creation of unity within democratic plurality. No institution would think of levelling all the regions by slowing down the more progressive or economically stronger among them. On the contrary an attempt must be made to find the optimum conditions for all.

We must start from the premise, that state interventions must be so directed, that they do not handicap the strength of entrepreneurial initiative, still always the most effective trigger of growth. The difference between planning and economic planning activity must always be clearly evident. But even the best meant help can be detrimental. Can the public authorities advocate installing their instruments for regional policy at the expense of the producer of a substitute good or at the expense of communities in their competition with a comparable location? There is a whole catalogus of important and always to be heeded precepts for regional policy.

It is not possible to level out existing disparities between particular regions overnight. A glance at the varied economic strength of individual regions makes it clear, that it is now high time for a systematic regional policy to generate the pre-requisites for a balance between the regions. The institutions are equally concerned about the regions of disproportionate underdevelopment and the conurbations, although the problems are naturally of a different order. No figures are needed. The names of some of the regions will do. Simply compare Lombardy and Calabria, the Camargue with Paris, the Eifel with the Ruhr. Almost all States have been trying to diminish more or less skillfully the existing disparities between particular regions. One notices here the lack of a unifying rationale. At a time of increasing interpenetration of economic areas, spreading even far across frontiers, such isolated action in a competition orientated economic system can only lead to distortion of competition. Immediate treatment is more urgent than ever.

:auses behind the regional disparities

No measures, however sound, will be effective unless they are precisely tailored o the needs in question. Thus to take stock beforehand is a pre-requisite for :very activity of the public authorities, otherwise without such information :ven willing investors must helplessly pull decisions out of the blue.

)isparities arose as soon as man became "economic". Entrepreneurs looked for he most favourable place for their activity. The decision was then mostly)ower supply or transport orientated. The evolution towards the division of abour economy with the more potent significance of the marketing sphere)rought in the first sight of agglomerations. The natural location advantages till play a part today, even if in the face of technical progress their importance ıas waned. So today for those seeking sites of water as a source of energy s scarcely a requisite. Harnessed energy has taken over this work. All the ame countless decisions on location are taken in favour of the proximity of vater. One only needs to think of the immense quantities of cooling-water vhich the heavy and chemical industries need every day.

;ite characteristics for agricultural and mining activities are in a similar situaion. By the nature of things there is no outright balance to be struck here, as imply natural advantages prevail. The public authorities can anyway make a ubstantial contribution to avoiding a monostructure. The advantage of only ɪne location factor is very quickly overcompensated just as no product is ubstitute proof.

:arly conurbations arose in the industrial boom, sparked off by deposits of :oal and iron ore. While remaining regions clung to traditional structure thus ıandicapping development the conurbations themselves were spiralling up. The lrive of the public authorities to create better transport networks triggered off . boom in the conurbation locations, which further necessitated initiative by he public authorities with all their services and new jobs as a result. Since at hat time there could be no mention of a systematic structural policy—either rom the regional or sectorial aspect—it was no wonder that these early centres ɪroliferated in an altogether disorganized and unwholesome manner.

:he public authorities at that time went ahead with their assistance policies ɪased on a completely false concept. Projects were pushed which promised uccess. This meant that the anyway already successfully functioning regions .e. those with a high contribution to the gross national product internally —took a disproportionately high share of the blessings of the national infratructure measures. Thus man created additional artificial disparities. The gap ɪetween these centres and the remaining regions became wider and wider and nade it almost impossible for ready investors to invest there due to the neglect ɪf the plainland. Thus the most unfavourable pre-conditions possible were ;ranted for the inception of our regional policy today. A state of affairs apɪlying not only to Germany but to the whole of the European Community.

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For regional policy three stages of development are all-important:

(i) Disparities due to nature-given location benefits,
(ii) Disparities due to *cyclic infrastructure measures*,
(iii) Disparities due to changes in the decision criteria among potential investors.

While in the *first two cases policy can proceed from clearly defined data*, in the third case it is very difficult to make attempts at levelling out. The public authorities are constantly obliged to inform themselves over changing entrepreneurial expectations and decisions and to readjust accordingly forthwith *their respective methods of treatment.*

The economy has also made zig-zagging movements in its decisions concerning locations. Following the era of nature governed location decisions, *technico-production advantages clearly gave the ultimate push towards decision.* It was a question of finding the favourable combination of capital and labour. In the course of increasing division of labour, this crucial point was sharply switched to the marketing sphere. An important factor in these two phases was a *favourable communications network in relation to a sufficiently large and* favourable market. Even after these general priorities led to no positive results, decisions appeared to be made in the end simply in relation to the total costs of a location. Here began the bottle-neck in the labour production-factor. In *an emergency all good intentions were forgotten and the economy moved into* the countryside, where lower wage levels could be anticipated, without considering additional costs of distribution and possibly professional training. There was no further mention of a systematic settlement of all regions.

Only in most recent times has the concept returned that in the last analysis the overall costs of a location must be decisive. The soap-bubble on which the public authorities were sitting had also burst. At first blush it had seemed that by this move into the deep country a natural counterweight against agglomeration was making itself felt and was allowing retarded regions the chance to keep in step with the big ones. The disillusion is all the greater now. Only with substantially greater means can measures be taken towards a balance of economic strength.

Regions change their faces just as towns have changed theirs. It is not the towns themselves but the conurbations like the Randstad in the Netherlands and the Ruhr in Germany which pose the problems. Less and less in future will towns be a place of production rather than communication following the so slow and belated recognition of the aftermath of chaos in Europe, caused by the era of "progress at any price".

Summary

The public auhtorities are today faced by the necessity,

(a) of reducing a further influx into the conurbations.
(b) of demolishing remaining monostructures,
(c) of shielding municipalities in less developed regions from a ruinous competition.
(d) of aiding regions so that they may offer properly their particular location advantages.

The economy has three possibilities for decision.

(i) invest further in the conurbations and with these high investments obtain transport facilities into the bargain.
(ii) make more favourable investments in the politically promoted regions,
(iii) forsake the industrial states of the Community and invest in non-Member States.

It is assumed that in future the public authorities have an interest in preventing or obviating investments, which can not guarantee a near optimal utilization for the whole.

Factors determining entrepreneurial investment decisions

Naturally one cannot expect investors in future to direct their investments according to only nationally economic exploitation criteria. The investor wants his investment to be amortized and managed into a maximum profit. The task of the public authorities is not to steer the investments but rather to stimulate preference for a particular area. This can happen through a suitable configuration of the investment conditions. A close survey and collation of all the data affecting the investment decision by the particular enterprise is essential.

It strikes one as critical, that only about 30% of the total direct investments of German undertakings abroad are being effected within the Member States of the EEC. A further 20% were invested in EFTA, 20% in America, while the rest in the main is going into the development countries. This is where the public authorities must make a start. The disproportionately large share of the extra-EEC investments can certainly be the springboard for a useful critique and investigation of one's own arrangements for potential investors.

In so far as investments in non-Member States are not market-policy motivated, it is indispensable for the effective formulation of the future policy of the public authorities, from municipal to supra-national level, to analyse entrepreneurial decisions be they on policy, technique or production, and draw their conclusions accordingly. The public authorities must start from the premise, that for the individual enterprise, contemplating investment, only the sum of the location factors is significant. No two enterprises have the same "dream package" as regards their location requirements. There will always be quite

specific dominant factors, for instance the availability of labour, a not over-high wage level, the outward communications set-up, the start-up costs, especially in the case of an enterprise needing a relatively large surface area. Enterprises will and must also keep their market and marketing opportunities in view. An opinion poll in Germany among leading industrial enterprises, concerning readiness to invest, clearly showed, that not one enterprise will pin its decision on one criterium. On the one hand, the thinking in many firms is to safeguard their exports by means of their own production units abroad, for often enough markets gained by trade can only be held by offering the customer the necessary on-the-spot service. On the other hand, in recent years in the German economy, expansive thinking has come to the fore as against this defensive attitude. As in the USA ten years ago, the Community today is becoming aware of its own strength and stressing it, wherever, by product or capital strength, the prospects of breaking into a worthwhile market are especially great. Concepts based on short term results are clearly taking a back seat.

Against these two market strategies, the so often emphasised motifs of lack of labour, exploding wage costs, investment subsidies, political uncertainty etc. play mostly but a small part. One should start from the premise, that new locations be sought, only if they are accompanied by one of the above motifs. However important the differences in labour costs, they still lag behind the far more decisive question of whether, at the new location, there will be an *adequate market to hand. If investor's deliberations were decisively moulded* by questions of labour cost etc. the German economy would years ago have been obliged to invest much more extensively in low-wage countries like Italy, Spain and Turkey etc. The increased numbers of migrant workers especially in the northern countries further illustrate the uncertainty of the labour force and labour costs being the only determining factor.

Similar behaviour can be seen over aid to investment in various countries The efforts of investment promoters whether they are from the USA, Scotland, Ireland, Canada or India, are often as pathetic as they are futile. They make a lot of way but only act when accompanied by solid motifs for investment. And this is only too understandable. Anyone prepared to invest 10 million DM will only do so, because he reckons on a definite gain in the long run and not *because a percentage grant is assured. Other things being equal*, this last consideration may fourthly or fifthly turn the scales in favour of a particular country and will do so all the more rapidly, the smaller the enterprises and the less they must let themselves be led by considerations of market strategy.

Furthermore it benefits no one within the Community if concerns relocate merely for the sake of structural improvement or for the sake of a new market, without achieving a better integration of production factors. Relocating across frontiers merely so that someone else collects the trade taxes is futile. This outlines in short the difficulties involved for regional policy in successfully getting new investors to the desired location. For this reason much greater attention will have to be *paid to the auto-recuperative powers* of any region.

Any region in a fully occupied economy has a growth potential only from its own strength. Industrial concerns must be driven to improve continually their factor input-output ratio by increasing the returns on sales or by reducing factor input. Here it is the task of the public authorities to see that an optimal exploitation of the region's development potential is attained via the market mechanism, with the help of regional policy in the form of an economic development or structural adaptation policy. This is equally valid for raising the economic strength of weaker regions and for the withdrawal of productive strength from the conurbations. For only here does the migration of labour lead to a drop in the hitherto high proportion of fixed costs in the overall costs of the public expenditure and to a drop in economic production costs. Furthermore the public authorities must see to it, that the gamut of enterprises from the market orientation standpoint is very varied. The decisive vehicles of economic growth from the marketing structure angle are the enterprises with distant markets, since a solely regional demand runs up against frontiers.

Concerns within a region are continually beset by two adaptation problems:

(i) They must always optimally adapt their marketing structure to shifts in demand.
(ii) Technical progress entails constant evolution of production structures.

This means in regional terms, that the industrial adaptation procedures also constantly change the requirements of the regional infrastructure in quality and quantity. The public authorities must exercise their influence on location conditions and flexibility of production structures so that the latter always match the claims of a growth economy. These measures by the public authorities must not stop at branch level but must advance at the overall level of the enterprise. This means at the same time that regional policy has to operate functionally and not structurally in assessing the concerns by their demands on the regional factor potential and by their contribution to opening up the region's development potential.

This requires long term economic planning by enterprises and regional policy. Enterprises must not guide themselves by empiric values alone nor must they strive for only short term maximization of profits. The public authorities do not have an income distribution but rather an income generation policy to put forward. Only thus is an equitable growth and location regional policy feasible.

In implementing their policy the public authorities have a multiplicity of factors to consider. Growth inhibiting in the broadest sense for example is an over rapid regional concentration of growth industries with increasing factor demand, so that the release of labour forces from economic zones with traditional structures is not enough to meet the additional labour needs of these industries.

An over rapid increase in residential population also leads to bottle-necks in

the public utility installations. Costly improvisation would then be necessary in the sector of social capital. A rapid regional concentration pays off only if it does not cause an escalation of costs from the initial public outlay. Steady growth in any region is in any case preferable to an erratic evolution.

The objective setting of a long term regional policy must create a dynamic balance between the increase in far and near-market orientated enterprises, between concerns with extra factor demand and those with factor release and between the degree of exploitation and enlargement of the public utilities on the one hand and population size and influx on the other. A prerequisite for every regional policy activity is therefore knowledge of:

(a) the grouping of the firms according to their market disposal,
(b) the developing trends of external and internal regional demand,
(c) the changes in production costs and rationalization possibilities,
(d) patterns of power on the market,
(e) natural location conditions.

A regional economic structure favourable to growth and locations hinges on two characteristics of the enterprises:

(i) *their ability to keep pace with the long term structural shifts of terminal* demand and to so optimize their own market opportunities,
(ii) their ability to exploit the utilization scope of production factors evolving through technical progress and the need for mass-production and so optimize in the long term their production structures.

Very careful thought must be given as to which institution concerned with these developments can turn these industrial requirements most beneficially into reality.

Before deciding on such executive organs there must be in every case a com*prehensive regional analysis. Here one must not* overlook the difficulty facing the regional policy analyst in supplying information to illustrate not only the current situation and developing tendencies but also ways and means to ward off undesirable phenomena.

Deductions for the public authorities from investor behaviour

An exact definition of what is understood by a region must precede any activity to ensure its efficacity. Are, for instance, administrative frontiers also regional frontiers? Are regional frontiers established for all time? The selected areas must not be too large otherwise specific phenomena overlap, neither does too narrow a definition consider the trend towards a larger market. In preparatory work the inventory of measures taken up to now is also to be reckoned with. Coordination therefore pre-supposes here vertical and horizontal orientation.

It was already noted that enterprises do not take decisions on investments and relocations overnight and without a thorough examination of all conditions. In fact they take into consideration a whole package of particular factors. But since no enterprise is in a position to ascertain all data required—data collection being too costly—for reaching decisions without the aid of the public authorities must be made on the basis of incomplete research.

A lack of information arises for the enterprises, when we also consider the question of the regional policy measures applied by the regions themselves. A list of all the instruments in use, their conditions and effects is needed. This documentary work is not difficult. It becomes a problem when the scope of handling the manifold instruments is considered. Particular factors of influence are moreover almost identical. Differences arise, however, in respect of degree. Irregularities of competition and infringements of system conformity are by no means rare.

Here is one of the most important starting points for the comprehensive, consultory function of a superordinate expert. For the local and national institutions of regional policy, industrial settlement, economic development or whatever it may be called, will mostly be grateful for encouragement towards the optimal use of the available instruments. Up to now there has been well-meant talk of sample solutions. But if a superordinate institution is to propose an individual solution attuned to the region, then the initiative must come from the region concerned.

Every institution must always be alive to the fact that aid, however well meant, can all too easily boomerang with adverse effects. Distorting competition within the municipalities of a region, obstructing the producer of a substitute good instead of the promoted article contradict the axioms of competitive economy.

The function of the public authorities must avoid any attempt at a perfectionist solution. Economy and society need less a programme of planning than a programme for design.

Imbalance in economic development is always bad—whether it arises from disproportionate over-growth or persistent stagnation in certain regions. Regional policy must therefore act in two directions. Selectively restrictive, when need be, in keeping private investors away from certain areas and promotive in the case of underdeveloped areas.

The theoreticians go further in claiming that regional policy must remain neutral vis-à-vis economic trends. But relationships between regional policy measures and economic trends cannot be denied. For the EEC this fact can be involved in difficulties over a common regional policy, for despite all the world-wide interpenetrations most of the Member States are confined by

national business cycles. The close relationship between cyclic economic policy and regional policy should also not be disavowed. In the broadest sense, every structural policy will provoke cyclic effects. Of course excessive investments in fully occupied regions will induce inflationary tendencies by overstraining the labour market with high wage offers. Productive investments on the other hand are a welcome means of evening up weak points within the demands of the Magic Square.

The instruments of regional policy

The multiplicity of the means utilized in regional policy by the individual institutions is confusing to the layman, all the more that equivalent instruments are labelled with different names A short list of those used up to now will clarify:

Loans to undertakings
Capital additions
Premiums
Transport aids
Free allowances
Subsidies
Depreciation benefits
Securities
Closure premiums
Special depreciations
Obligations for licences as restrictive measures

Interest allowances on credits for rationalization
Funds for development of industrial areas
Supplements to investment through tax reduction
Government participation or government participating firms within undertakings
Re-imbursement of professional training charges
Tax exemptions, for example on power consumption
Price concessions for ground acquisition

The totality of these means covers all objectives. A successful regional policy activity does not need to search for further instruments; this applies in both the national and international sphere. Rival overbidding by equal ranking institutions competing for the investor is the order of the day. Distortions of competition result, which beside the financial burden on the respective region provoke further imbalances.

Therefore the measures need to be coordinated, at least as regards their definition, at top level. In the opinion of the European Commission this coordination is to be implemented globally after the situation in the individual regions has been examined and put up against the regional policy aims of the public authorities. After such a projection, the respective superordinate authorities

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Considering the example of the EEC, it seems that in the meantime all Member States have realized the necessity of putting in minimal solutions. A first step towards a comprehensive directive was made by the decision of 20 April 1971. The Member States undertook to comply with common principles in their directives for aid. Coordinated procedures for regional policy measures will never on their own lead to a reduction of the existing imbalances.

Optimal solutions through a rational division of functions

The Member States of the EEC agree on the need for common action and a standardization of objectives The swing away from the watering-can concept is clear. Everyone seems prepared in principle for the creation of a comprehensive crisis plan. In this case the effective scope for a common body of experts would be twofold. The example of the Mezzogiorno illustrates this. The Italian Government has bestowed every imaginable aid measure on this region. The infrastructure investments of the public authorities are a multiple of the means, which are placed at the disposal of other regions. Despite this, Italian and Member States' enterprises have not been led to invest there. The problem seems to hinge not so much on percentages of granted funds but rather on effective publicity aimed at the psyche of investors.

A second crucial point involves the efforts to demolish monostructures. Solutions, regardless of state frontiers, will facilitate future development.

The natural gravitation of the economic strength of a country towards its frontiers will need to be considered. A coordination between regions, which overlap frontiers is a priority.

The granting of politically motivated aid also causes difficulties. Germany in particular is faced with this problem. Close examination is needed to see how the high assistance levels for the peripheral areas adjoining the Eastern bloc are to be integrated into a generally applicable catelogue of regional policy instruments. The nearness of the Iron Curtain seems to call for extraordinary directives, for it is no idle remark: that if the German economy coughs these peripheral areas get inflammation of the lungs. With the funds granted up to now amounting to about 25% of the total investments, Germany is clearly above the ceiling level recommended by the EEC. Other States would certainly be driven to more severe axeing of aid. But aid for these peripheral areas seems to be waning in importance due to the establishment of regional programmes and appears for the future to be more firmly integratable into the general structure and regional policy. This will happen all the more quickly, the less the purely quantitative measures affect industrial behaviour.

With all the goodwill for a unified Europe, the Member States and certainly the four newcomers will still distrust, in the current phase, any initiative towards assigning authority to a superordinate institution.

Therefore in the first phase expectations from regional policy at EEC level should *not* be pitched too high. Progress by short paces offers better chances of long term success.

The negotiations of 20 October 1971 have shown fairly clearly, that among the Member States there is a readiness to allow the Community a right of discussion for the stage of advance measures.

Following the current of this policy, the Commission of the EEC can be assigned to set up pilot studies. These studies are to offer guidance to potential investors as well as to Communes and regions. The public authorities often lack the foreknowledge for a successful economic policy, which is haphazardly inserted into overall planning. In connection with this study it might be possible to make early deductions for the future behaviour of regional institutions and put forward proposals for the implementation of the projects. More extensive proposals such as setting up a common information and clearing agency for potential investors in the form of a European data bank providing all authoritative data on regions and placing readily understandable statistics at the disposal of the economy, are debatable. Practical difficulties are against such an institution, since the necessary preparation and standardization of nomenclature and measuring techniques must be achieved first. Again psychological factors come into play, since some regions will not feel inclined to release information, which they consider as their own publicity potential. The biggest stumbling block will appear in the financial questions, for in the long run a data bank would have to be self-supporting. This would assume that either input or output of data would be chargeable.

The proposal of the Commission, the instrument of the EAGGF for applying regional policy aims in structurally weak agricultural areas is certainly intended as a point of departure for the control of financing. In so far as the means disposed of by the Guidance section, within the ceiling limits, are not spent on agricultural structures in the narrower sense, then the structure will have been improved, according to deliberations up to now, by promoting the organization of new jobs outside the primary sector. In this solution the tendency towards an extension of these funds to general regional policy may be indicated.

The governments of the Member States are certainly grateful, if the EEC takes over the task of systematising and documenting the aid in kind of particular governments. A periodical service which points up and analyses current developments and informs the competent bodies of experts, will certainly be applauded.

All these points do not remove the impression that at the moment it is scarcely thinkable to delegate to the EEC or one of its institutions the authority to

instruct vis-à-vis the national teams of experts. Scepticism here does not seem out of place. This attitude applies less towards the experts of the EEC than to the Member States, without which any institution of the Community, however well meaning, cannot function. For this reason it does not seem to me recommendable, that, from the standpoint of efficacity, the task of regional policy be committed to the care of the Community.

Material reasons also demand intensive scrutiny. The regional policy measures affect the political, cultural, administrative, sociological, and budgetary structures of the Member States. With so many factors of influence bearing on the current individual proceedings in the Member States, the Community might be overburdened.

These reservations are clarified by the rejection of a formal decision concerning the further application of means from the Agricultural Fund for regional policy measures or the setting up of a regional fund in the budget of the Community, in respect of the decision for a realization by stages of an Economic and Monetary Union. The German Government also has its objections and recommends that measures involving extra means over and above those already extended to agricultural structures be adopted only after further progress in the integration of a European monetary union. For this reason, the German Government declared at the Council Conference in October 1971, that the terms of a common regional policy should be laid down in the first stage of the Economic and Monetary Union, but that the required financial means should be prepared, within the general budget of the Community, only on transition into the second stage.

Undoubtedly the public authorities enjoy a greater scope for developments. Support has come from the growing awareness of the people and a greater readiness to cooperate among local administrations. Concerted action by the *public authorities and the private economy* must provide solutions congruent with the system by effective infra-structure investments affording a successful economy to the entrepreneur and a planned growth for the region. Market congruent solutions are pre-supposed, for mistakes here are very difficult to rectify. Due to the poor financial strength of regions, infrastructure investments can scarcely be considered as entirely financiable out of the budget. Therefore investigations must be made to see whether private investors cannot contribute to financing the infra-structure measures.

On rationalization grounds a division of functions offers itself as an aid to obtaining optimal results. Without prejudicing any national sovereignty, the task can, as a special case, be assigned to the EEC. It would include:

(a) the carrying out of methodological investigations (pilot-studies) for a successful regional policy,

(b) completion of statistics on particular regions to be made internationally comparable over a common denominator,
(c) industrial policy directives in support of enterprises facing choice of location,
(d) providing support to the regions by compiling a location catalogue,
(e) providing guidance by the elaboration of future concepts for economic policy.

Any extensive activity—over and above nonmaterial assistance—be it financial or direct, must also be considered from the political aspect. The effects of a comprehensive regional policy on the national economic policy are certainly too great, for the governments of Member States to be prepared to let this "province" be administered by the Community. The execution of measures will necessarily in future be the responsibility of Member States. It is to be counted a success, that in October 1971 the competent persons concerned were ready to recognize as binding, the ceiling limits for assistance recommended by the Council of Ministers. In pursuance of this policy, one would have to examine the possibility of a solution for the regional policy sector similar to the one for agricultural policy. The EEC issues directives for regional policy and supervises their observance. The execution of regional policy measures, subject to the provisions of the directives, remains with the national institutions.

The setting up of a European regional fund should again be debated in the light of experience gained working with the EAGGF. The establishment of a crisis fund will possibly find supporters. The Mezzogiorno case has shown, that Member States alone are not able, however hard they try, to improve the economic strength of particular regions.

Of course the initiative of superordinate authorities must not lead to industry becoming "regulation bound". The final responsibility for investments and choice of location, according to the objectives of our economic system, must remain with the enterprises.

INDUSTRIAL DEVELOPMENT AND THE REDUCTION OF SOCIAL AND REGIONAL DISPARITIES (*)

Mr COPPÉ

SUMMARY by the Chairman of Group I

Member of the Committee of the European Community.

Mr Chairman, Ladies and Gentlemen,

Working Party I, on industrial development and levelling of social and regional disparities, has noted that industry has so far done competently what was long regarded as its only job, that of providing steadily increasing material wealth.

The rapid rise in the growth rate since the second world war has not yet been fully explained scientifically: the increase in the quantity and quality of labour and in the quantity and quality of capital only partly accounts for the high growth rate of recent years. In explanation, a number of purely qualitative factors have also been put forward, as additional hypotheses, including the rise in the general level of development, rivalry and emulation between the different economic systems, and the greater role of governmental intervention.

Rapid quantitative growth, however, goes hand in hand with heavy social costs, chief among which are mass flight from the land and certain sectors of industry, and large-scale migration. On the other hand, there has been little change as regards distribution of the benefits of growth. The shadow side of fast growth of a purely quantitative character is apparent.

Not that anyone objects to economic growth in itself. On the contrary, the Conference has explicitly acknowledged that economic growth is a valid and continuing aim of Community policy. Sustained growth is necessary, among other reasons, to meet the still enormous needs involved in reducing disparities and making up the many and increasingly obtrusive lags.

It was unanimously felt that industrial activity is and will continue to be the foremost factor in achieving economic growth. But while at no time was economic growth as such under attack, the Working Party was also unanimous that it must not be "growth at all costs".

(*) Translated from the French

ndustrial concerns must serve the community as a whole. Whether this prin-iple is reconcilable with private enterprise and private ownership as the basis f industrial activity was disputed, but there was no real consensus as to an lternative.

'here was on the other hand a clear majority in favour of increasing the luralist character of the present set-up, as neither private enterprise alone nor ıe public authorities alone possess the means for tackling the human and ɔcial problems of economic policy, effectively.

ı no circumstances, however, should the reforms envisaged be allowed to lead) a centralized bureaucracy. An industrial concern can be efficient only if it njoys a large measure of autonomy in policymaking, whatever the particular pportionment of decision-making authority between management and workers 'ithin it.

: is the kind of growth quite as much as the degree of growth that matters for ıe future of our society. Material progress must from now on be made to ɜrve predominantly the achievement of a number of new aims:

-There must be more effective control of economic growth and of the changes that go with it;
-A better balance must be achieved in the distribution of the national product as between infrastructure, productive investment and consumption;
-The internationalization of economic activity, more particularly by way of multinational corporations, demands that the Community structures be strengthened to ensure that there is a countervailing power, which is not nowadays always the case at national level.

he theme "The Function and Position of Individuals in the Enterprise" was ıbdivided into three extremely important and highly topical subjects, which ıe Working Party has discussed in detail, namely:

-Asset formation by employees;
-European-level collective-bargaining agreements;
-Worker participation in the concern, and particularly in the future European Company.

.s regards employees' asset formation, Mr. Friedrich is of the opinion that ɔecial attention will have to be paid to this matter in the coming years. In ıis connection he has pointed to the strides made in Germany in recent ɜars; he considers, however, that asset formation should not be confined to ɑrticipation by employees in the company's capital.

Ir Houthuys deals at length in his paper with sharing in asset growth and ıe "wages by investment" concept. His main conclusion is that labour can ɪd should view both with favour, as he considers there are many arguments ɔr them, production-wise and socially—economic expansion, guidance of

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economic expansion, control of inflation, democratization of business, redistribution of incomes to the workers' advantage, promotion of saving, and active involvement of workers in the economic affairs of their company and their country.

Mr Fogarty discusses asset formation and distribution in the context of incomes policy. He believes that we could see a revolution in the pattern of ownership. Whatever course is taken, he considers the organization of operations and enterprises' policy on profits and investment will become less and less the affair solely of the entrepreneurs and managements and more and more a matter for concertation and political-level decision-making. The trend, in his view, is clearly towards wider distribution of authority and ownership. In conclusion he contends that a policy on incomes and asset formation will be necessary if the projected economic and monetary unions is to succeed.

Concerning European-level collective-bargaining agreements, Mr Friedrich agrees with the Commission that there must be European-level dialogue between the two sides of industry, but within the framework of a European incomes policy which has still to be formulated. In his view, the Joint Committees proposed by the Commission do not square with the principle of free negotiation of collective agreements. It will not be possible in the foreseeable future to secure European-level negotiation of such agreements, so the ideal of collective agreements of European application should be abandoned if the dialogue between the two sides of industry is not to be jeopardized from the outset. Suitable subjects for talks between employers' and workers' organizations, in his opinion, would be current issues now assuming or likely to assume importance in all the Member States, such as employment policy, the feasibility of a European incomes policy, and so on.

Mr Houthuys on the other hand advocates European "outline agreements" and the establishment of European-level Joint Committees. He thinks experience at national level should be turned to account at European level. There need to be negotiations at all levels for decisions to be taken at the different levels—company level, industry level, inter-industry level and national level, and also European level, and in the case of multinational companies world level. It is better for the issues involved at these various levels to be settled by negotiation, and so in peace, than by strife. The Commission could and should do more in the future: it should compile a European register of collective agreements and set up more Joint Committees.

Mr Fogarty also favours European-level negotiation of European collective agreements. It is not possible, he feels, to wait for a harmonized legal framework. Any decision could be brought within the bargaining process. What is needed is alteration of power relationships within the Community, long overdue and now unavoidable.

On worker participation in the enterprise, and particularly in the European

Company, Mr Friedrich considers that the Community has a role to play. But it must never take what has been done in this or that country as a model for the other countries of the Community. Co-determination in an enterprise is a dialogue for the purpose of settling common interests as satisfactorily as possible, the aim being to integrate the workers into the enterprise, not to assert the power of one side or the other. Nor must co-determination ever be allowed to interfere with the business management of the enterprise; profitability and efficiency must not be made to suffer. The arrangements proposed by the Commission in the draft statute for a European Company provide no solution to the problem of European-level co-determination.

Mr Houthuys considers that we are at the parting of the ways—either participation from top to bottom of the enterprise, or alienation of the worker, with all that that implies. The trade union organizations, he emphasizes, have no desire to hamper the enterprise: they are out to establish more clearly, and to enhance, the role of the entrepreneur. As to the European Company and the proposed right of co-determination, Mr Houthuys hopes that the question will be settled as rapidly as possible. Whatever the detailed rules on co-determination in this connection, it is high time a step forward was taken at Community level.

Mr Fogarty considers that the prerogatives of managements should not be done away with, but that they should be redefined, to leave managements still in a position to direct the economic process properly. All decisions will need to be arrived at by negotiation.

As regards the problem of regional imbalance and ways of correcting it, the three rapporteurs find that despite or because of growth, and despite attempts at remedial action by the public authorities, such imbalance is still here, and indeed getting worse.

They state the issue by contrasting the crowded with the underdeveloped areas, a contract liable to hamper growth because the social costs necessary to keep the former viable are becoming an excessive burden on society. Wider geographical distribution of economic activities is therefore necessary in the interest of all regions, including the crowded ones. The authorities' incentives and disincentives have so far had little or no effect in restoring regional balance in our economies.

Whereas the Community's regional problem has hitherto been chiefly in connection with the agricultural areas, enlargement of the Community will also enlarge the scope of the regional problem to cover, more than before, the areas centering on older industries now in decline.

What measures, then, do the rapporteurs recommend to secure a better regional balance?

They all agree that this must be the aim, and that action must be stepped up, but they differ as to the means to be used, Mr Dido urging direct intervention by the public authorities in the production system, Mr Kienbaum wanting a drive to give entrepreneurs a fuller picture of the development potential of the different regions and additional measures by the authorities to offset the disadvantages of the backward areas, and Mr Ezra favouring a policy of overall economic reconstruction in line with the specific problems of both the agricultural and the industrial areas.

In Mr Didò's view mere infrastructure and investments aids are not enough: the authorities must make the necessary moves themselves, either by establishing public corporations or by taking a stake in private enterprises.

It will not do to "build cathedrals in the wilderness"· it is also necessary to set up small and medium-seized concerns in order to round off the broad economic basis for development, as in the Italian South. Mr Kienbaum argues that the investor's choice of location is governed by a number of factors; consequently the regions themselves should ensure that private companies are better informed, so as to help them in their selection of sites, and the public authorities should provide the necessary infrastructure and industrial estates.

Mr Ezra urges a more energetic regional policy; he suggests a breakdown into four types of region, with measures tailored to guide investment accordingly:

(a) Development areas;
(b) Intermediate areas;
(c) Neutral areas;
(d) Overcrowded areas.

In the debate, it was asked that Community-level priorities should be determined for regional intervention, based on common criteria.

What role should the Community play in regional development? Coordination of the measures taken by the individual countries is indispensable, but opinions differ as to what the Community itself should do direct.

Mr Ezra fully endorses the Commission's proposals on regional policy. Mr Kienbaum is more sceptical. In his view a combined Community national approach would be the most effective, the Community's role to be confined to coordinating the action of the Member States, more particularly in regard to aids; for the rest, it can furnish the regions with guidance for the framing of future economic policy, conduct pilot studies and establish rules that will be of help to enterprises in locational selection.

Mr Dido, on the other hand, is severely critical of the Community's regional operations so far, and considers the Community's armoury for carrying out an effective regional policy totally inadequate. If the Economic and Monetary

Union is to become a reality, this overall regional policy will have to be implemented at Community level, and the Community will have to be given the requisite means.

I am happy to add that the debate I have just summed up has produced practical recommendations concerning the *functioning and policy of the Community.*

In particular, we have been urged to inject a social element into Economic and Monetary Union, since otherwise it would make no sense.

We have been warned not to adopt too "global" an approach to the Community's economic and industrial policy, tending to gloss over radical qualitative differences. The collection of information and compiling of forward studies right up to industry level have been advocated. This more precise approach should apply to all sectors, including services, and also to small and medium-sized business and to crafts.

On regional policy, there have been suggestions for action to be taken at regional, national and Community level. Community-level action should include coordination of national measures, preparation of pilot studies, and arrangements for the assembling and dissemination of information on all advantages that regions can offer.

The Commission has also been asked to set up a European register of collective bargaining agreements.

One important point which has been made several times is that now ways must be sought, in a non-doctrinaire spirit, for tackling problems that are growing ever more acute. They will not be easy to find: that has been acknowledged.

At all events, it has been much questioned whether it is right for ownership to be the legal and moral basis of authority in the enterprise.

Mr Boissonat in his excellent paper has argued that the higher-powered social cut-and-thrust of today is due in part to the fact that economic growth itself is so high-powered. This point is felt to be worth putting before the Conference, the more so as it calls in doubt the hope widely entertained that economic growth would help to lessen social tensions.

One aspect calling for clarification is the question of investment planning, more particularly in the regional context. I had the impression that although the views put forward appeared on the face of it to conflict they were in fact not so far apart as they looked.

It is agreed by all that some measure of investment planning is needed, and

that it must work effectively in practice. But there is no agreement as to the means to be used. The notion of detailed centralized planning was strongly opposed. This matter should be gone into further as soon as possible, bearing in mind that the Commission is to submit proposals to the Council before October.

I feel a close examination of the British arrangements for regional investment planning would have been valuable, at any rate as a framework of reference for further thought. Unfortunately there was not the time. The subject should be more fully discussed at some later date.

I am happy to say that the contention that the whole set-up as such needed to be rethought was not pursued. The point was mooted, but was not taken up in the debate.

At the same time, if there was no black-and-white, doctrinal-type argument on the set-up itself, there was ding-dong discussion on the effectiveness or otherwise of practical steps to achieve, economically and socially, greater justice and greater respect for the individual in the production process within the enterprise.

The Committee for its part embarked, with all the more vigour after the discussions that had taken place, on an exchange of information on experiments currently in hand for getting away from assembly-line-type work, which with the job compartmentation and the deadening sameness it involves is becoming increasingly intolerable to people who are now better educated and more aware than they used to be.

Working Party I paid close attention to an exchange on European collective-bargaining agreements, which are among the high-priority issues treated in the Commission's 1971 *Preliminary Guidelines for a Community Social Policy Programme*. As the Commission Member responsible for social affairs, I am encouraged by the support which was forthcoming from the union delegates on this. Incidentally I am not allowing myself to be discouraged by the lack of enthusiasm on the employers' side, though it does not befit a progressive and sensible approach.

The Yugoslav model of "self-management" was several times referred to in the debate, some seeing it as a valuable yardstick, others doubting its effectiveness.

On the other hand bureaucratic centralization of business decision-making was not put forward as a practicable alternative to the present decentralized system—even though the existing structure of that system was much criticized.

In particular the subject of the European Company was gone into in some

detail, and indeed some practical amendments to the proposed statutes were suggested, even though from some quarters there was opposition to the very principle of participation. Also, it is felt that efforts will need to be made to ensure that the craft sector, and the high-skill sectors generally, likewise dove-tail smoothly into our our industrial policy.

To conclude, several times in the course of the proceedings there came to my mind the well-known quip, "The impossible we do at once; miracles take a little longer". Undoubtedly all present were thinking, at any rate as regards the medium-range future, in terms of miracles, even if the formulation was sometimes conflicting—but conflicting more, at that, in word than in thought, and more as to feasible means than to ultimate ends.

PART II

Industrial Development, Collective Needs and Quality of Life

(Group 2)

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TRENDS IN COMMUNAL AND PRIVATE REQUIREMENTS IN EUROPEAN SOCIETY, AND THEIR IMPLICATIONS FOR INDUSTRY

by

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TRENDS IN COMMUNAL AND PRIVATE REQUIREMENTS IN EUROPEAN SOCIETY, AND THEIR IMPLICATIONS FOR INDUSTRY(*)

P. HUVELIN

In all the big industrial countries, the increase in collective needs is one of the major lines of force in economic development over recent years.

Although the reality of this phenomenon is incontestable, the expression "collective needs" seems hazy even ambiguous and in our introduction to this report we must try to outline the area we are considering within the economic, social and political context of European society today.

Implicit in the title of our report is a necessary definition of collective needs as opposed to private needs. This contradistinction seems to have asserted itself over the last decade and is taking its place with the basic truths, which shape collective attitudes.

Now this contrasted image of man's needs tends to mask the complementary aspects or more precisely the interdependence between the particular needs of the individual and those which match up with the common aspirations of a whole society or a group of individuals. It seems necessary to stress the fact, that private needs and collective needs reciprocally provoke each other's appearance and desire for satisfaction.

The spread of the motor car, generating a collective pressure on the development of highway infrastructure, is obviously highly characteristic of this interdependence of the two types of need. Opposite processes although less discernible are none the less just as precise. As an example, the rapid rise in the general level of instruction over the last twenty years is a phenomenon which can be regarded as a part of the domain of collective needs. It has inspired a flourishing demand for cultural goods and services, a type of need, which as we see it, cannot be assimilated with a collective need and which derives more from an original and personalized need by the individual.

It thus seems that the concept of a dichotomous structure of needs cannot be

(*) Translated from the French

retained as a basic characteristic; on the contrary, the phenomenon of the evolution of collective needs is complex and cannot be analysed in isolation.

As a corollary to the contrast generally allowed between collective and private needs, a distinction has been made between needs expressed and satisfied by the market and those which miss the play of the market and depend for their satisfaction largely on the efforts and responsibility of the public authorities by means of total or partial financing out of public funds.

This distinction is to some extent a real one; the market economy system, such as we see working in Europe (or the USA) is not slanted towards the satisfaction of collective needs. Some collective needs are inadequately expressed by the market and private enterprise faced with a mandate for profitability is focused on the solvent needs of the consumer, such as they appear, effectively or potentially, through the market.

However, we think it necessary to underline the limits of this distinction between private and collective needs.

First of all, from the standpoint under discussion, the situation in each of the different Member States of the EEC is not exactly the same: some kinds of need satisfied in one country by definitive action on the part of the public authorities, are met in another essentially by private initiative or by a mixed recipe between the public and private sectors; there is therefore no rigid rule.

Even if we leave aside the sharpest contrasts, we can still see in the case of some prime collective needs, very deep-seated differences in terms of the rôle of the public authorities. The solutions adopted in Great Britain and France concerning health are not comparable. The National Health Service in England is entirely financed by the State budget and supplies free services for the whole population. The system of Social Security in France, which does not exclude private medicine is fed by subscriptions from employers and insurees and in a small way by the State. In many cases, its services are neither entirely free nor paid directly by the Funds (Caisses) of this organization. The table overleaf points up the diversities between the six EEC countries.

Elsewhere, in areas where public funds ensure total financial support, in some collective installations for example, we can note according to the country that the responsibility for decisions and the management of budgets are found at more or less centralised levels. In this respect, the importance of the part played by local administrations in Federal Germany contrasts with the highly centralised system in France. As we see it this is not a simple administrative variation, but a difference in the actual expression of collective needs and the means of satisfying them: within the compass of the German administrative organization, the needs for collective installations are grasped much more

Country	Subscriptions				Share of the public authorities		Miscel-laneous	
	Insurees		Employers					
	1962	1968	1962	1968	1962	1968	1962	1968
Belgium	23	23	51	50	20	22	6	5
Germany	29	31	53	49	15	17	3	3
France	22	22	70	69	7	7	1	2
Italy	14	17	73	66	8	11	5	6
Luxembourg	10	23	48	40	22	28	10	9
Netherlands	37	39	44	46	9	6	10	9

directly and responsibility is carried out in a less diffused way than in the French system.

Some aims, relatively recent, but which are making themselves felt in the mass of European society are broadly out of line with a definition of collective needs based on the criterion of public initiative and finance. We are thinking here for example of the re-evaluation of manual work in industry or in more general terms, the development of men in the big companies. Here it is obvious that the joint responsibilities of all the social partners are on trial and at the top of the list the responsibilities of those running the business.

Although it seems acceptable to maintain pragmatically a distinction between collective and private needs based on the fact that the satisfaction of collective needs misses the play of the market and often involves public finance total or partial, we must stress that this is a convention, which does not fit closely with reality and which masks divergent conditions.

Moreover, the motive idea behind thinking for the future is, in our opinion, that of constant change in collective needs, which bars any rigid and static definition.

We want to stress here that the substance of collective needs is closely tied to the level of development of a society and from a twofold standpoint.

Firstly, *economic development* is accompanied by a continual extension of the specific collective needs of industrial and urban civilization, from the basic infrastructures as far as preservation of the environment.

Secondly, in parallel with the progress of economic development, the overall rise in the standard of living modifies what may be called the "system of values" of a society. This basic phenomenon transforms the range of collective

needs: new needs appear, others lose their edge. As an example, the sympathy expressed towards the most underfavoured, or in more general terms the quest for less inequality of opportunity has materialized as a collective need of advanced societies, in proportion to the rise in the standard of living.

These general remarks on the evolution and complexities of the concept of collective needs lead us to limit our analysis to the current situation and to explore the relatively near future i.e. ten to fifteen years ahead, whilst taking care not to suggest rigid solutions, in the light of today's problems, which would mortgage the future.

Some basic hypotheses

The evolution of collective needs and "future options" can only be studied within some basic hypotheses relative to the main trends of economic development in European society.

The first of these hypotheses concerns maintaining an objective of relatively rapid growth, this being considered as a preferential means of ensuring the rise in the standard of living.

We are not excluding the fact that the system of values underlying this objective of rapid economic growth namely dynamism, technical progress, creation of wealth etc. will fade out in time. But this alternative does not seem to have to be retained on the horizon ten years hence. This being the case we shall strongly underline the fact, that the problems raised as the penalties of growth now and henceforward, and this discussion proves it, will progressively blur the very rhythm of growth. Again the current measuring instruments for economic growth will become less and less adequate and in this respect very great attention must be paid to the efforts now under way in various countries and at Community level to rejuvenate the concepts of National Exchequer: behind a question of technique there lies in reality an ethical problem which can be summarized in a basic question: how do we quantify social progress?

In full knowledge of the inadequacy of our measuring instruments and their total incapacity of grasping the negative effects of growth, it is worth while recalling some of the proportions of economic development since the development of the Common Market. Over the years 1968-1969 the growth in the gross national product for the whole is at a rate of 70%, which corresponds to about 55% per head of population; over the same period private consumption swelled by more than 65%, more than 50% per head.

In the hypothesis which we are following, namely pursuit of rapid economic growth which will have to be gauged by completely modernized instruments, we must stress the permanence of the needs of private consumption. As an

example, let us recall the prospects offered by the efforts in France at the time of preparation of the Sixth Plan and review its most characteristic features.

Over a period of twenty years from 1965-1985, the basic hypothesis is for a rate of annual growth in expenditure on private consumption of 5%, about ½% below the growth rate for the gross internal product, which means that this expenditure is multiplied by 2.6.

In this aggregate the share of foodstuff expenditure decreases appreciably with, however, a relative increase in "quality" or speciality products: the co-efficient of multiplication for the period 1965-1975 is 1.58.

Among the non-foodstuff items of consumption, the weakest factor of growth is in clothing with a co-efficient of multiplication of 2.4.

Housing and household equipment expenditure rise more rapidly than the average, multiplying by 2.9.

The growth in cultural and leisure expenditure is also above the average —multiplied by 3.5.

May we point out that in certain sectors, where the satisfaction of needs involves a mixture of private and public finance, high growth rates are found.

This is so for expenditure on hygiene and health, where the co-efficient of multiplication for 1965-1985 is 4.8 and also true for transport and telecommunications with a co-efficient of 4.7.

A second hypothesis concerns continuing movement in industrialization. We think, that in all Member States of the Community, industrialization policy will always be relatively prominent.

Here we should recall briefly the role of industry in social and economic development. Industrialization is not an end in itself but a means of attaining a certain number of economic, social and political objectives. It is mainly via industry that present day advances embodied in the development of science and technique emerge as economic progress. Another point is that the industry of each European country is exposed to international competition. The interplay of these two factors over all industrial activity exerts a constant pressure expressed by marked progress in productivity and by a relatively moderate evolution of prices.

We may also note that the share of public receipts coming in from industry is higher than the share of industry in the national product.

Industrial development can thus contribute in releasing additional financial

means to meet collective needs, quite apart from any increase in global fiscal pressure.

We must also stress the decisive role played by industry in attenuating disparities between regions and in generating opportunities for employment in response to the demands of competition.

Faced with an objective of economic and social progress, we do not feel that there are any alternatives. Industrial development is the only way. The problem is to channel this development so that it will be more closely adapted to the deeply felt hopes of today's society and enable us to preserve the framework of life and the natural wealth of tomorrow's society.

Our third hypothesis concerns the basis of the economic system of Europe as a whole.

We shall look at this situation within the framework of maintaining the present competitive economic system. We want to stress here that the control of competition is inseparable form the proper procedures of a market economy. If competition is to remain as the open rivalry which is an irreplaceable factor in emulation and progress, experience constantly shows anarchy in competition can eventually destroy wealth and generate social and political unrest both within and between states. We must therefore emphasize the importance of the problems involved in the control of competition at the overall European level.

Beside these general hypotheses, which try to place within a firm outline the problems posed by the rise in collective needs, it seems to us that the "future options" can only be defined under certain constraints of economic development and that they should respect two particular requirements.

The first is to reject any formula which heightens the factors of inflation. We mean here that it does not seem acceptable to suggest choices, which will implicitly involve acceptance of a chronic policy of budgetary deficits for the sake of financing collective and social installations or transfer expenditure.

The second constraint concerns the level of overall fiscal pressure. In our view, to heighten fiscal pressure as a means of expanding financial resources for the satisfaction of collective needs, is a solution likely in the medium term to be largely ineffective.

Certainly in the short term the heightening of fiscal pressure can release additional resources to finance installation, running and transfer expenditure. However, experience proves, that beyond a certain threshold level, which has nearly been reached today in most European countries, fiscal pressure dampens the initiative behind the dynamism of the economy or leads to fraudulent action, which it is difficult to combat effectively.

As a constraint, we shall establish then that the overall fiscal pressure be maintained at a level near today's, stressing that this in no way precludes internal adjustments in the various types of taxation in proportion to the objectives to be attained for a fuller satisfaction of certain collective needs. These adjustments bring in political choices; these will have to be made within the range of a necessary reconciliation of taxation systems between the Member States of the EEC.

It therefore seems desirable that the next medium term programme of the Community should include some mutual deliberations on the distribution of fiscal levies and the part they might play in the satisfaction of collective needs. Such mutual thinking would allow comparison of experience between each country and the formulation of some common guidelines.

To complete this rapid analysis of our hypotheses, representing the outline of our study, we will emphasize one central idea: the continuation of European construction.

In this respect we think that European construction pre-supposes some agreement with the preceding theories. This point certainly deserves thorough consideration and it must be quite clear that the different individual nature of each country facing the problems in question represents a source of mutual enrichment. However, it is difficult to conceive or imagine progress in European unity if serious divergences appear in the economic system in question or [illegible] s taxation systems [illegible] ere does not exist [illegible]

Therefore in keeping with the hypothesis of continuing progress towards European unity, we shall emphasize the fact that exchanges between members of the Common Market will extend to new areas and involve not only capital but also men. In this respect the next medium term policy programme of the Community should give preferential treatment to the study of problems posed by the rise in collective needs, a study which we see in terms of a detailed comparison of the existing conditions in the different Member States. This supposes that specific studies will be implemented and developed, which will overload the staff of the National Exchequer, which is not prepared for the problems in question.

This conference forms the point of departure for this thought which cannot help but crystallize around a central option: of guiding economic development towards a fuller satisfaction of collective needs.

For convenience of analysis, we retain as collective needs, those whose satisfaction misses the play of supply and demand on the market and involves in many cases total or partial public financing and we shall try to bring out some

of the lines of force in the present situation and anticipated developments within ten to fifteen years.

In the immense range of collective needs, as understood today, we can distinguish several categories of needs with appreciably different development.

The permanence of traditional collective needs

A first category concerns the traditional collective needs, characteristic of any organized society: national defence, public law and order, safety of the citizen, justice . . .

In this field development is closely bound up with the society's system of values, whose importance we stressed earlier. As an example, the problem of law and order and repressive justice during recent times has assumed new dimensions, which reflect the changes in the collective conscience of society.

The political choices made in certain sectors, such as National Defence have obviously had very direct economic consequences.

However we will not deal here with this portion of collective needs, which concerns the sphere of politics and ethics. We shall simply underline the permanence of these needs: defense, law and order, safety are all inherent in any form of social life anywhere, at any time and the nature of the substance of these needs changes in relation to the moral, social and political context. It is quite clear, that options taken regarding this class of collective needs will make a decisive contribution to shaping European society.

The outline of life in industrial and urban society

A second category of collective needs covers those which are bred from the increasingly rapid technicological changes and by industrial and urban society.

Here we are dealing with infrastructure of all kinds, mainly transport and telecommunications; urban developments and localization of workplaces; regional balance; the campaign against the harmful effects generated by industrial production and consumption; the protection of the environment and our cultural and artistic heritage.

This mass of collective needs involved in the development of industrial and urban society corresponds with a range of new scarcities and shortages more or less acute according to the sector or country. Analysis of this evolution shows a distinct degradation of life there with an interplay of the costs and negative effects of concentration and technical progress, namely pollution, noise, destruction of sites, increased time and expense in getting from home to work.

The *policy on regional balance and the problems* set by the protection of the environment, the preservation of natural wealth and the campaign against industrial "nuisance" are the subjects of special reports. It is not our place to tackle these matters in depth. We would like to make a general remark, however, regarding the problem of pollution and industrial nuisance. The necessary reforms in present conditions, which will inevitably involve financial burdens on businesses, will be all the more rapidly made, if international agreements either comprehensive or at the level of the main lines of activity, equate the *obligations of enterprises. The coordination of the Community programme* of policies for the protection of the natural environment is absolutely necessary to avoid distortions of competition. Such a coordination can and must be an aspect of rapid and decisive progress.

Without tackling the specific study of development of transport, telecommunication and urban construction needs, which special reports are dealing with, we arrive at an enquiry into the mechanisms for the expression of demand and the adjustment of supply to demand.

Whether it concerns transport, telecommunication or urban development demand is only too often expressed by serious shortage: so for instance the problem of urban development occurs today in the form of sorting out the congestion in the towns. The collective awareness of the degradation of life in urban society is displayed by pressure of public opinion, combining often contradictory desires and generally expressed with no consideration of costs. The system of financing by means of taxation on investments and public services, in the eyes of those who benefit, breaks the link between satisfaction and cost. In many areas the strength of the need hinges on the low or non-existent price, a concept which leads to distortion of judgement at both the public authority and consumer level and extends the range of needs ad infinitum.

As far as supply born by the public authorities is concerned, one must first of *all take note of the inelasticity of resources in relation to demand.* Furthermore, supply in terms of investments or public services covers either State monopolies or activities largely shielded from competition.

Because of this, arbitrations, already difficult in themselves, escape the constraints of profitability and management as a result of even the smallest charge imposed on them by proper action of competition.

Several lines of research may lead to an improvement in the mechanisms for adapting supply to demand in the field of collective needs which we defined earlier.

On the plane of demand, it seems necessary first to re-establish the factors of choice between the satisfaction of different needs: choice between collective

and private needs and choice between the various collective ones. This presupposes an effort towards clarification on the plane of costs and prices coupled with a real publicity campaign with regard to public opinion. The campaign should be backed by an effort to sensitize opinion towards tomorrow's problems. We think that studies on long term outlooks could be implemented mainly within the compass of the EEC to explore a wide gamut of possible future concepts, including by all means even "wildly inacceptable scenarios". The objective here is to provoke collective awareness, up to now scrappy and blurred, of how much is at stake and to stimulate everyone's sense of responsibility.

Moreover, structures should be sought which will allow comparison of the different aims. Consumer associations can play an important part here, but local administrative authorities can also be considered as a standard vehicle for the expression of demand by collective installations and can link the dialogue between opinion and the public authorities. Arbitrations (and management) would, according to cases, have to be made at a more or less decentralized level.

Let us stress here that the rise in collective needs is in itself a factor particularly encouraging to this dialogue, which moreover is in parallel with aspirations, which though still vague are making themselves felt, towards the participation of the citizen in the life of the city.

Concerning supply, there seems to be a need for recreating, in certain spheres, an atmosphere of competition and rivalry. This means that we must question again the gratuitousness or low price of some of the services as a result of public responsibility and finance. In this respect experiments currently running in certain areas, such as the motorways, should be extended to other activities as for example telecommunications. The point is to release the State from certain tasks so that it may devote itself to new needs and at the same time to submit new branches of production to the pressure of the market and also particularize some of the collective expenditure, even if it means subsidizing directly the most underfavoured categories of consumer.

As regards the important problem of public works contracts, the situation should be evaluated realistically. Due to the local nature of work sites, international competition can exist only beyond a certain level, since the contracts of a lower value can interest only the enterprises in a favourable geographical situation. Harmonization at Community level in awarding contracts has therefore economic meaning only if competition can work effectively. Publicity attached to the calls for tender can encourage this competition. But it should be checked, by examining annually public contracts exceeding a certain value, that the proceedings conform with the law in that bids from foreign enterprises have been considered under the same rules as those from national firms.

In the second place, the public supply contracts show the characteristic of being coupled directly with industry and of short-circuiting the controlling mechanisms of commerce. These contracts in consequence represent a body of strategy currently utilized towards ends of general interest, where figure pre-eminently the adjustment of market conditions and industrial policy in the broadest sense. Under these conditions it is neither likely nor desirable that governments let go of this instrument as long as the Community is not politically constituted and is not therefore able to pursue the tasks still presently carried by the States themselves

In certain sectors and for some supplies, it is not out of the question that the serious objections raised by the current projected directive on the coordination of procedures for the award of public supply contracts may be overcome now or be within practical range.

This is why the application of such a directive should be selective and the determination of the sectors where it would be feasible seems to be the first objective to propose to the States. In an initial phase its application could be considered as purely optional

The needs of man in his function as a producer

A second category of collective needs tied to the rapid development of industrial society concerns man's needs in his function as a producer. We distinguish here two areas. One represents the problems of training and professional mobility and the other represents the problem of revaluation of certain working conditions in industry and in the large enterprise.

On the first point the tripartite Luxembourg conference highlighted the need for a Community policy on employment because of rapid structural changes tied to industrial development. We do not possess the instruments to enable us to make detailed provisions for employment in the medium term, and progress in this field is limited by the rapidity and nature, hard to foresee, of the changes occurring in a relatively fast growing economy. However we can and must overcome some of the deficiencies in our knowledge of the evolution of employment, by trying to fill the gaps in statistics and by comparing the studies being made in each country, which assumes an effort towards co-ordination of concepts and definitions. As an experiment, one could try at Community level to set up forecasts on the evolution of employment in some branches either in relative decline or under strong expansion.

The problem of professional mobility is closely bound up with the problems of training either for youngsters or for adults. The important progress made in this field in a country like France has been in the form of national collective agreements affording to each worker a genuine right to permanent training.

Moreover action is underway which may ensure the *recycling* of those without work. This example among others leads us to stress that measures taken on a national scale should be extended by a Community policy for coordinating national private or public initiative: lengthy training periods for executives and young workers in one or other of the European countries, European institutions for the training of instructors or others sent there.

However the efficacy of policies implemented in this field overloads the scheduled staff and the institutions and largely depends on the development of attitudes.

There seems to be a need for an in-depth drive towards sensitizing opinion to the necessity and advantages of permanent training and "*motivating*" those who will benefit from it. This action which puts on trial the joint responsibility of all the partners in society should find support among the various teaching bodies.

In connection with increasingly rapid technical and *technological progress*, the need for a revaluation of working conditions is asserting itself. This development is especially clearly seen in industrial production, from manual trades to executive and management jobs.

The *need for a fuller blossoming* of men's potential abilities, in their daily work, will tend to become more prominent *in proportion* to the satisfaction of private consumer needs and in relation to the rise in the general standard of instruction and quality of professional training. Such justified aims are often thought of as a brake on growth. We think, however, that they represent a factor of renewal, whose importance will keep on growing over the next decade.

The reduction in working hours and the adjustment of retiring age mainly in relation to the strain of certain jobs is an initial partial answer, although they cannot be considered with no regard for the consequences at the level of the general balance of the economy. Although it is possible and necessary to set medium term Community objectives in this field, the staggering in time for the implementation of these measures hinges on the national context.

The second line of research and action lies within the compass of the enterprise, in terms of a social cell. Here men can and must find the right conditions for their development and in this respect, it must be quite clear, that today there is an enlargement of the responsibilities of the head of the business. We shall stress here the crucial importance of a policy for communication of information to staff to be understood as a means of stimulating a taste for and a sense of responsibility on the part of everyone, no matter what the level of his function in the company. This policy assumes special contours when applied to executives and foremen for it must precede sharing preparation for decision making and delegation of authority.

The revaluation of manual labour is also registered among the growing preoccupations of the industrial enterprise. The experiments running now in all European countries aimed at checking the disadvantages of intensive mechanization and enriching some of the manual jobs and especially conveyor-belt work, are still only pilot studies which although still undecisive signify awareness of the problems. In order to define the mainstreams of desirable and feasible progress over the next six years, a balance sheet on efforts made in this field should be a subject for investigation within the framework of the next medium term economic policy programme of the EEC.

The reduction of inequalities

A fourth category of collective needs corresponds with policies directed towards reduction of inequalities of opportunity and positions. In this field developments reflect the system of moral values of a society, a system which is modified in relation to the overall rise in the standard of living and the scope offered by scientific and technical progress. Here we find on one side: training, health and social security, social housing and on the other: policies to help those categories which remain on the fringe of the advantages conferred by economic growth namely old people, handicapped persons or, amongst the most underfavoured, the migrant workers and the professional misfits.

It seems also, that although the policies of aid for developing countries comply with very complex motivations, they are not divorced from the rapid rise in the standard of living of European society, which has facilitated a collective awareness of the responsibilities placed on the most affluent nations by the relative poverty of countries under development.

This problem of aid for the developing countries is here the subject of a special report, so we shall not tackle it here. Moreover, the size of the problems in question makes an exhaustive examination impossible and we shall limit ourselves to proposing some general guidance.

The satisfaction of collective needs in this particular field corresponds with one of the most complex phenomena of economic growth, namely that of redistributing revenue in terms of a *combination* of choices either moral, political or economic. In the first place the dearth of knowledge in this field must be recognized. We understand the phenomenon of redistribution of revenue in the form of financial flow. We are familiar with its source namely direct and indirect taxation, subscriptions to social security etc. On the other hand we possess only global information concerning the recipients of these redistributed resources and the definition of objectives to be attained as expressed in financial terms within the compass of national programming or multiannual budgets has only a very confined social significance. This lack of knowledge will weigh more and more heavily on choices and arbitrations and we think that a really high priority should be given to overcoming this problem. Two pivots for re-

search seem obligatory here. It must first be established firmly and precisely who the beneficiaries are in the flow of finance and redistribution of revenue; this initial study is indispensable in order to find measuring gauges for the efficacy of the mechanisms of redistribution. This mass of data must be the subject of widespread information and form the framework in which the normal and desirable argument will develop between the social partners. This argument must lead to the definition of clear objectives which commit the collective responsibility of the whole of society and are expressed at the level of political choices.

We do not want to minimize the difficulty of such an effort which is obviously considerable, if only because it brings in non-measurable values and implies a coordination of research carried on in several disciplines, especially economics and sociology. Nonetheless it seems to us that only progress in knowledge in this field will enable us to find the answers to the basic question of the end results of growth, which we recalled at the start of this report. Let us stress that in some countries, such as France for example, within the framework of planning, research has already made considerable progress. Close coordination of work carried out in the various countries would obviously be stimulating and a factor of rapid progress.

From now on it seems that the technique of Planning Programming and Budgeting, initiated in France under the name of rationalization of budget choices could be more broadly developed. This method is only of partial interest to the collective needs in question here, since it approaches the problems only from the mathematical and economic profitability angle. All the same this aspect of the management of public resources cannot be overlooked. Experience proves that progress in this area runs up against major difficulties, namely the rigidity of administrative structures and the training of men, understood in the broad sense of their capability and attitudes. These two difficulties will not be overcome without a certain political will-power which could be stimulated at the European level by a far more systematic comparison of experience and by pooling the means of training men.

Changing needs and options to be taken in the national instruction and education have assumed new proportions in recent years. Previous criteria of the efficacy of public action, namely the raising of the school leaving age, the admission of greater numbers into the universities have waned in importance, and the education system as a whole is in a state of chronic crisis of clashing ideologies.

The coming of mass education together with demographic developments and the admission of greater numbers to secondary university education has happened at a time when progress in knowledge was accelerating. The result has been considerable upheaval at the level of teaching structures and programmes in contrast with earlier development and thus representing an initial factor of disarray for teachers as for pupils and students.

Moreover although economic growth and the industrial society wield a positive influence on the education system by offering a wider choice of jobs and careers and raising the level of qualifications, this influence is questionable today for two sets of reasons.

Firstly it is no longer possible to extrapolate previous trends which ensured for those qualified, careers in keeping with their ambitions and suited to the education they had received. The result is a deep-seated anxiety among students as to their professional future.

Secondly, to adapt the education system simply to the needs of the economy is felt as an attack on the deeply felt aspirations of each individual and as an element of political and social conservatism.

The teaching crisis takes the form of a repudiation by the younger generation of the society offered to it, a repudiation all the more violent in that it is inspired by a sense of distress and anxiety for the future and it is in these terms that we must speak of a genuine crisis. For European society the problem of the young is of capital importance, which it is not our place here to discuss in depth, but which must be included in the basic concerns of the Community.

We shall confine ourselves to recalling some partial aspects of modernization in teaching systems. The situation today obviously calls for some obligatory arbitration concerning the amount of resources in men and means which must be devoted to national education. Among the courses of action possible, it seems necessary to give preferential attention to the objective of improving the quality of teaching even if this means reversing the trend to prolonging the average length of studies. These guide lines would follow in the direction of the policy for reducing inequality of opportunity and would facilitate a better integration of students into active life. On the other hand it must certainly not prevent bringing forward the starting age of primary education, which plays a crucial part for children in the most underfavoured categories.

The adaptation of official channels of training in secondary and university education towards job and career opportunities implies collective coordination and research to which industry must contribute by developing medium term surveys on the provision of employment and by striving to bring out criteria of general training or professional qualification. Obviously this contribution on the part of industry will be effective only if it is made at the European level and more specifically within the compass of Community industrial policy.

In the field of Social Security understood in its broad sense, the development of needs corresponds with complex reverse mechanisms, which tend to expand *ad infinitum* the range of needs.

Firstly, economic growth allows an overall increase in real incomes. Thus

luring the period 1958-1970 the increase in real incomes from work for the nass of the European countries reached about 70%. On the other hand with he rise in the standard of living, inequality of opportunity and income are less ›asily born. In certain areas which affect the vital needs of man, such as lealth for instance, scientific and technical progress will act naturally for the)enefit of the richest and to the detriment of the poorest. So we can note in all European countries, that parallel with the raising of the standard of living, :here is a trend towards extending policies for the reduction of inequality, shown for instance by the evolution of social security expenditure as a percentage of gross national income or of household income.

Allowances in Social Security as % of the national income

(in %)

Item	Year	Germany	France	Italy	Netherlands	Belgium	Luxembourg
Total of allowances in Social Security	1962	17.3	16.3	14.0	14.3	15.9	17.1
	1965	18.3	18.8	17.7	18.0	17.1	19.6
	1967	20.9	19.9	17.9	19.9	18.4	22.5
	1968	20.3	19.6	18.5	20.8	19.8	22.1

Allowances in Social Security as % of the net available income of households

(in %)

Item	Year	Germany	France	Italy	Netherlands	Belgium	Luxembourg
Total of allowances in Social Security	1962	19.5	17.7	15.0	17.5	16.7	19.2
	1965	20.2	20.6	18.8	21.8	18.2	22.4
	1967	22.4	21.7	19.3	24.3	19.8	24.2
	1968	22.3	21.6	20.0	25.4	21.1	24.3

These figures highlight a growth in the transfers made by the various systems of social security greater than that of the national income, and also the importance of the transfers: nearly one fifth of the national income.

Within this overall package the two most important items are sickness, for which in 1968 the allowances were spread according to the country between 3.5% and 5.5% of the national income, and old age between 13.9% and 10.6%.

If we look at these two items as examples, then needs can only grow, since progress in the area of health will contribute to the growth of needs for old age. In the face of this massive trend towards the growth of needs covered by social security all the European countries are confronted by arbitrations due to

the impossibility of adjusting the financial resources to the needs without jeopardizing the overall balance of economies.

These choices emerge from the responsibility of political authority. They reflect the concepts of each country in the realm of fellowship, but for us they must represent one of the motive elements in European society. Without wishing to seek a useless harmonization of arbitrations, it appears that the basic problems, which in the medium term can only become more serious, should be tackled within a general reconciliation of the Social Security systems.

As a conclusion to this exercise, in order to take an overall view of the development of collective needs, it seems to us that the EEC is a notably positive factor for a fuller satisfaction of needs to the extent that it forms a frame, in which the relative successes and failures of each country can be compared. But to strengthen the Community there must be some agreement on the main objectives to be attained in this field.

Until we have strengthened our knowledge on the social efficiency of the mechanisms and public action underway in the various countries to ensure satisfaction of collective needs, it is an illusion to think of defining precisely and practically the mass of the future options before the Community, which would ensure a stable balance between private and collective needs. This leads us to treat as a priority investment the development of studies and research currently underway at the national level and which should be the subject of an initial combination within the next medium term policy programme.

In the current situation, where in the face of rising collective needs, arbitrations are compulsory, we have first tried to broaden the margin for manoeuver in public action while respecting the general balance of the economy. In this respect, we have suggested, that in some sectors covering material collective needs the non-chargeable or low price concept be given up and the activities in question be submitted to the play of market demand and supply, even if it means subsidizing the most modest categories. Transport and telecommunications could be selected as test cases.

As regards man's needs in his function as a producer the necessary revaluation of manual labour and adjustments to improve the function of the big company relevant to the potential abilities of men, assume a dialogue between all the social partners and a sharper awareness of everyone's responsibilities. This awareness could be stimulated by systematic comparisons at Community level of national experience. But although certain common guidelines seem useful and desirable, to establish a decision making or negotiatory organ at Community level would be an illusory and dangerous step today, due to the diversity of national traditions, differences in ideology among the trade union organizations, and the different political situations in the States themselves.

The policies directed at reducing inequality of opportunity and conditions call

for a new approach to the problems centred on the mechanisms and implemented measures, and which could be made on a Community scale and cover initially health, education and old age.

It seems scarcely possible and realistic to aim here for a genuine harmonization between the mechanisms operating in the different European countries. But it is necessary to avoid further distortion and to define medium term Community objectives.

Collective needs and industrial development

First of all, at the level of industry in general, we recalled how industrial development is the prime mover in the drive for economic and social progress. The memorandum of the Commission on industrial policy paid special attention to defining guidelines, which might encourage the strengthening of industry in the Community and we think that in itself the memorandum forms the initial face of this study concerning the means of ensuring a fuller satisfaction of collective needs. It has to be completed but cannot be fundamentally questioned.

In this respect we must stress that industry in general at the Community level harbours considerable potential progress in productivity, even though a fuller satisfaction of collective needs will lead to an extension of service activity, where this progress seems very limited. To release these reserves of productivity must still be a vital objective in the development strategy of European countries. This assumes that public and private efforts in research and development will be continued and that the action of competition at State, European and international level will be improved.

From some standpoints, a fuller satisfaction of collective needs coincides with this demand made on industrial productivity, whether it concerns collective material goods such as infrastructures in transport or telecommunications, or collective non-material goods such as professional training or health. But in other fields the satisfaction of collective needs seems to conflict with this demand on industrial productivity; in this respect it is certain that the fight against industrial nuisance and pollution will be a new burden for the industrial enterprise; even if a sound regional balance implies setting up industry in depressed regions, the profitability on activity there may look less advantageous than in already industrialized areas: at the level of the general balancing of the economy, the financial needs of public investments are competing with the financial needs of productive investments.

The burdens and pressures imposed on industrial enterprises by a fuller satisfaction of certain collective needs cannot be considered without regard to their negative effects on the plane of industrial development; these items must be the

subject of harmonization at Community level as is the case for instance in regional policy or by specific directives covering certain manufactures. This is a pre-requisite indispensable to avoid distortion of competition, which provokes sooner or later more or less veiled protectionist reactions.

Although we have repeatedly underlined the political nature of the choices and arbitrations called for by fuller satisfaction of collective needs, we should highlight here the special responsibilities of industry as a whole.

First of all it is quite clear that in the field of preservation of the environment and natural resources, industry must collaborate closely in future studies, which are absolutely vital for clarifying the medium and long term choices. These studies could be put in hand very rapidly on the scale of some particular problems, such as energy or water resources, and they could very shortly lead to an awareness of how much is at stake and the policies to be implemented.

As we have indicated earlier industry also has a direct responsibility in the field of professional training. Considerable progress can result from a closer liaison between education and the heads of enterprises. But action here must *be an integral part of the medium term development strategy of the industrial* sector and any medium term sectorial provisions must be accompanied by a genuine policy on professional training, installed at the level of the enterprise and the professional organization.

The increase in collective needs opens prospects of new markets for industry. Medium term provisional surveys and research for the future could be made much more thoroughly in some areas such as city or inter-city transport, the control system for road and air traffic, industrialization of building and public works and development of audio-visual techniques in teaching.

But at the same time in all areas where the potential development of collective demand seems considerable, we must seek out the means of stimulating the spirit of enterprise. In this respect it certainly looks as though means can be implemented on the plane of technical research and development. This means uncovering innovation much more systematically; going back if possible as far as the plane of basic research in the sectors of collective demand regarded as medium or long term priorities.

It is at the level of the industrial enterprise, where the different problems must be set and solved, which are raised by a fuller development of man in his function as a producer at whatever level it may be. The problems cover the revaluation of manual labour as well as delegation of responsibility and participation in the life of the enterprise. They can only be solved by communication and awareness of everyone's responsibilities.

Although on some matters a systematic framework seems needed and desirable,

it looks as though the problem of the quality of life within the enterprise calls for specific solutions within each one in proportion to its size, the nature of its activity and the temperament of the people working there. The construction of Europe, as we stressed at the start of this report, implies an extended exchange in the sphere of knowledge and people. Thus broader and permanent comparisons between the particular experience of every enterprise will progressively release at the European level the answers to the problems involving the quality of life within the enterprise.

TRENDS IN COMMUNAL AND PRIVATE REQUIREMENTS IN EUROPEAN SOCIETY AND THEIR IMPLICATION FOR INDUSTRY(*)

C. DELACOURT-SMITH

For four hundred years the economic life of Western Europe has been dominated by the concept of the market. The dynamic of economic life has been the production of goods and services for those who had the means and will to pay for them. This basic idea has been applied in successive stages of technological development; it has itself been a powerful influence in stimulating technological development. It has changed the relationships between classes; indeed it has developed successive new systems of class relationships. It has profoundly influenced political development; in the nineteenth century it contributed to the rise of the nation state which provided a unified area in which a market could be created of a size more appropriate to the scale of mechanised industrial development than the smaller political units of the eighteenth century had been.

Over the last hundred years however, with the very rapid growth of productive power, it became increasingly recognised that complete dependence of economic activity on producing for profit by individuals or firms was not sufficient. Production for profit could not for example be relied on to provide education, housing or curative health services in the quantity or to the standards required; nor to ensure a healthy environment; nor to guarantee employment for all those who wanted to work. In a variety of ways the collective regulation of economic activity and the development of public effort have grown. Public authorities have in many spheres had to supplement or supplant religious or similar voluntary efforts to meet education, health and other social needs which the market economy could not fulfil. In many countries too the state has been obliged to undertake the task of controlling and sustaining parts of the industrial structure.

Thus when the EEC came into being there already existed in the countries which constituted it a varied pattern of public enterprise—mainly designed to strengthen the economic infrastructure—and of public provision for a range of social and human needs.

The emphasis of the Treaty of Rome was on the reduction of barriers to the operation of competitive free enterprise throughout the Community and the facilitation of the free movement of capital and labour. Such a wider exten-

(*) Original text

sion of free enterprise was expected to contribute to economic growth and stability and so enable living standards to rise. The social provisions of the Treaty were expressed in general terms: harmonization of social standards through the Community was seen mainly as a contribution to free movement of labour and hence more as a facilitation of economic growth than as a deliberate end in itself.

Economic growth and a rise in living standards have certainly taken place since 1958. The rise in private consumption in the countries of the EEC during the period since 1955 outstripped that of the United Kingdom or of the United States. It also generally outstripped the rise in public consumption. Indices of changes in the volume of private and public consumption are shown in the following table.[1]

	Private Consumption			*Public Consumption*		
	1955	1969	1970	1955	1969	1970
Belgium	79.4	127.2	133.2	66.0	135.4	140.7
France	66.5	137.3	143.1	77.6	123.7	129.2
Germany	62.0	131.6	140.6	60.0	113.9	121.0
Italy	63.8	133.9	145.6	71.9	124.4	128.7
Luxembourg	—	122.4	132.0	—	117.3	120.5
Netherlands	69.7	136.2	145.2	83.0	111.1	119.1
EEC	65.7	133.9	142.4	69.1	119.6	125.7
United Kingdom	80.1	112.7	116.3	92.1	111.7	113.2
USA	77.4	132.3	134.7	78.7	137.7	150.9
Japan	52.4	165.5	—	70.2	140.3	—

Source: Figures for 1955 and 1969 from EEC Statistical Bulletin – *National Accounts (1970 Year Book)*. Figures for 1970 supplied by the Commission.

A clear change in emphasis is however now coming to be widely accepted as a result partly of the experience of the EEC countries, partly of that of other countries.[1] Economic growth is no longer seen as automatically solving social problems. Indeed it is clear that economic growth may be accompanied by increasing inequality, environmental pollution and social tensions.

[1] Generally speaking unless the context indicates otherwise the term 'EEC' is used in this paper for the 'Six' and the 'Community' for the wider area which includes those other countries who signed the Treaty of Accession in January, 1972.

The Preliminary Guidelines for a Community Social Policy *Programme* quote the Third Medium Term Economic Programme (announced in March 1971) as declaring that economic policy "must serve the aims of society".

"The Community's economic policy cannot be limited to the joint targets of growth and stability. It takes on its proper significance by its contribution to improving the conditions of existence; it must aim both at raising the standard of living and improving the quality of life; it must also help in achieving greater solidarity for the benefit of the least-favoured groups of the population".

It goes on later to quote the "general objectives which all member countries regard as priorities" and includes in these:

(a) greater satisfaction of requirements in education, health and housing;
(b) increased efforts to combat the harmful effects which economic growth has had on the environment;
(c) greater quality of initial opportunity;
(d) greater justice in the distribution of incomes; and
(e) adaptation of social welfare schemes to modern needs.

The Social Influence of Industrial Employment

Industry (which may here be taken to stand for all gainful employment whether strictly industrial in its character or not) affects social life not merely by its products but also by *its profound influence on the life style of those* engaged in it and of their families. The arrangement of the working week determines the social life of the family; the availability of employment influences the location of the family home; the security or insecurity of the employment determine the stability of the family living standard; and indeed the character of the work process which the individual is required to undertake will over a period influence him mentally and temperamentally and may extend its influence even to the ways in which he will be disposed to spend his leisure.

Industry must therefore take its responsibility to its workers as one of the most important of its social responsibilities; but like others it requires for its full discharge a background of appropriate policies by public authorities.

The greatest single contribution which can be made to the well being of the worker is the maintenance of full employment; which in its turn involves governments in maintaining a high and stable level of demand.

Unemployment showed a considerable decline in the period 1958-1970 in the EEC countries but since then has tended generally to rise. In the UK there was a steady rise during 1970-1971 which brought the figure of unemployed virtually to a million.

Full employment however is not a question merely of the total number of jobs set against the total number of workers available; the suitability of the jobs and their location is as important as their existence. So beside the figures of unemployment must be set the increasing migration within the EEC (which now involves nearly a million workers), the attraction of nearly 2.5 million workers from outside the EEC (mostly unskilled workers from the Mediterranean area) and the migration to find work outside the EEC (probably now involving some 700 000 workers).

Frequently migrant workers are employed in the least satisfying and worst paid jobs, with the worst prospects and—outside their working lives—the least satisfactory social conditions. Their position is already being recognised as a major element in any programme to improve the quality of life in Europe. To quote Guidelines for a Community Social Policy Programme:

"The cultural gap between migrant workers and the population of the host countries has widened. In some circles there is resistance to, or distrust of, a foreign 'presence' which is sometimes regarded as excessive."

Migrant workers are less and less becoming adapted to the life of the host country and often find themselves alienated from their home country as well. The effects can be particularly serious when the migration of a worker without his family leads to family breakdown and to harmful effects on the children.

Attention is needed as well to the social problems which arise in the course of the work process itself. Industries rise and decline, new centres of employment grow and old ones decay, demand for types of skill and experience fluctuate and change. New processes of work make more intense demands, particularly on the nervous resources of workers; many processes, new and old, give rise to health and safety hazards.

Consideration of the social effects of industrial employment suggest the need for:

(a) continuous action by governments to ensure a high and stable level of employment;
(b) recognition by employers of the scale of social responsibility which attach to the management of productive employment; and the universal development of personnel, staff and services to ensure that that responsibility is constructively accepted;
(c) effective trade union organisations, recognised by employers and governments as the spokesmen of workers and entitled to negotiate on the whole range of matters affecting workers' interests;
(d) more rapid progress towards equality of conditions and opportunity for women;
(e) forecasting of future manpower requirements of industry so that training

and retraining of workers may be undertaken in accordance with the changing needs for skills and types of workers;

(f) regional planning which among its objectives shall seek to harmonise changes in the scale and location of industry with social considerations.

Health Service

Industrialised countries with concentrated populations must—even if only for economic reasons—perforce undertake measures of public health which ensure adequate sanitation, a pure water supply, control of epidemics, inspection of food supplies and similar standards of public hygiene. All the countries of the Community have in fact accepted public responsibilities going beyond this and extending in one way or another to the provision of personal medical care.

The scale and variations in expenses incurred in this way can be seen from the following table. (These figures should be read in the light of the fact that some public expenditure in this field may appear under other expenditure headings —under social services for example, or, in the case of health services for the armed forces, under defence).

	Percentage of GNP devoted to public expenditure on health		*Percentage of public expenditure devoted to health*	
	1957	*1966*	*1957*	*1966*
Belgium	0.5	0.7	1.7	1.7
France	0.3	0.7	0.8	1.8
Germany	1.5	2.2	4.0	5.6
Italy	1.4	1.1	4.5	3.1
Luxembourg	1.2	1.6	3.8	4.1
Netherlands	1.0	1.5	2.6	3.3

Source: From *L'Evolution des finances publiques dans les etats-membres des Communautés Européennes 1957–1966* (published by the Commission 1970)

Generally speaking the expenditure by public authorities covers public health and sanitary organisation; payments to institutions for social and preventive medicine; and the expenses connected with clinics, hospitals and sanatoria. Differences between countries in the method of financing hospitals and the large part played by local authorities make comparisons between countries and analysis of totals particularly difficult to make.

During the post war period the organisation of personal medical care has

attracted increasing public attention in all developed countries; and has inde particularly in the United States of America, been the subject of a good deal controversy.

Collective provision for such care exists throughout Western Europe; but t forms of organisation and the financial arrangements vary greatly from cou try to country. At one extreme there are the comprehensive schemes financ predominantly out of general taxation—of which the National Health Serv in the UK is the longest established example. Generally speaking in the EI countries the participation of the government is less direct and great reliar is placed upon state-supervised insurance schemes—generally financed regular contributions from employers and employees—and sometimes su plemented by private insurance. The methods of organisation vary consid ably; and there may be variations within a country in the cover afforded groups or individuals according to the provisions of the scheme by which th are covered.

According to estimates made by the Office of Health Economics the propo tion of the population covered by such health schemes is approximately follows:[2]

Belgium	95
France	98
Germany	98
Italy	83
Netherlands	85
United Kingdom	100

While it is not difficult to set out the organisational arrangements which cov the populations of the countries of the Community, it is more difficult comment upon the standards of care made available. Traditions in medici vary greatly; even the harmonization of qualifications—so that qualified do tors may practice where they wish within the Community—is not yet achieve It is probable, however, that generally speaking standards of care do not va greatly between the countries of the Community. Anything which needs to l done in direction of diminishing inequality is likely to relate to the improv ment of standards and facilities in particular areas, which because of pover or inaccessibility lag behind the standards applied generally.

The questions which arise for the future are rather those of determinin priorities which should be observed in future expansion. They must be considere against the enormous increases in medical knowledge and its applicatio which have already occurred in the last quarter of a century and against th further enormous increases which are expected.

2 Published in journal '*New Society*' (London) 18.2.71.

Already there is a very large gap between what is practicable and what is economically possible; and the likelihood is that this will grow greater. Hence the emphasis which must be put on determining the priorities and on evaluating results so that knowledge, effort and skill are put to the greatest use.

One clear feature of the future is that the proportion of the population over the age of seventy will increase; indeed the greater the attention given to the reduction and treatment of diseases and injury the more will this be true. This may lead to a shift in emphasis from the treatment of acute illness to the treatment of chronic illness; and—as is already happening—by concern for prolonging not merely life but activity and enjoyment.

In some respects allied to this is the requirement for greater attention to the needs of the handicapped, the disabled and the mentally disturbed. It is estimated that in Britain alone there are over 3 million people living in private households who have some physical, mental or sensory impairment Of these over a million can be classified as handicapped. If these figures are representative—and these is no reason why they should not be—they suggest that in the Community there may well be some four million handicapped persons and some eight million more suffering from impairment. This is apart from those in these groups who are in institutional care. There is already within the EEC a programme for the disabled which constitutes a valuable beginning in this field.

In all these cases—of the elderly, the disabled, the handicapped, the mentally disturbed and the young chronic sick—the problems are not purely medical. Social arrangements as well as medical care are essential, particularly to ensure that members of these groups have opportunities of happiness and usefulness in company with their fellow men rather than becoming isolated and institutionalised.

There are other projects on which it is clear that additional expenditure would result directly in the alleviation of suffering or the saving of life. To take two examples:

(i) there is now available a range of specialised medical equipment which if suitable staff can also be provided will alleviate suffering or save life;
(ii) better emergency arrangements for dealing with road accidents could also secure such a result. The road accident is now responsible for between a third and a half of the deaths of Europeans in the 15-25 age group and so constitutes the largest single cause of loss of life in this age group.

The scope for preserving life and enhancing activity is so great that it is particularly essential to evaluate the effects of treatment and ensure the most effective use of resources. This is also a field in which there has been great advance which permits the more effective discussion of many questions of technique and institutional arrangements.

(a) What type of hospitals should be built?
(b) What are the relative advantages of keeping a patient in hospital or returning him as speedily as possible to his own home?
(c) What advantages would be gained from a more rapid development of health centres?
(d) What scope is there for the use of volunteers in assisting to expand medical and social care?

There appears to be two fields in which deployment of resources would yield benefits above the average:
(i) industrial health (embracing occupational medicine and work environment service); since effort here conduces to industrial growth and to the exploration of those aspects of health influenced by the physical, mental and emotional effects of working life;
(ii) health education; since in such fields as alcoholism, drug addiction, lung cancer, venereal disease, home accidents, child care and occupational safety and disease a greater public understanding can contribute to the improvement of health standards.

In the field of health a stage can be foreseen when political options about priorities and about the organisation of services will have to be exercised.

Social Security

Since 1958 the expenditure on social security in EEC countries has tended to rise, both as a proportion of public expenditure and as a proportion of the gross national product.[3] Although, owing to differences in the methods of organisation and finance of social security arrangements in various countries, comparisons cannot always easily be made, the tendency appears to have been for a levelling up and for those countries where in 1958 social security was relatively less developed to increase their spending more rapidly than others.

The trend of social security expenditure and the share of GNP it absorbs are showshown in the following table.

	1962	*1966*	*1967*
Belgium	13.5	15.1	15.4
France	13.1	15.5	16.1
Germany	14.1	15.5	16.7
Italy	11.9	15.9	15.8
Luxembourg	13.9	16.1	17.7
Netherlands	12.2	16.5	16.9

Figures taken from *Basic Statistics of the Community 1970.*

[3] See *L'évolution des finances publiques 1957–1966.*

Precisely comparable figures are not available for countries outside the EEC; but such as are available suggest that these percentages are about the same as those in Sweden, significantly higher than those in the USA or Japan; and somewhat higher than those in Norway, Denmark or the United Kingdom.

Arrangements vary widely and it is hard to generalise; but generally speaking, compared at any rate with the UK, the tendency is to rely on occupational schemes particularly for benefits other than old age and retirement pensions; although in all fields of social security government intervention and control of social security has been increasing as a result of the reciprocal arrangements between countries necessary for the effective cover of migrant workers. Occupational schemes which generally cover family allowances as well as sickness, maternity and old age or retirement provision have come into being as a result of pressure or the circumstances of particular industries. They tend to be earnings related and to be financed by substantial contributions paid by employers and to a lesser extent by employees. Despite state supervision the financial contribution made to social security schemes by general taxation tends to be small.

Thus the 1966 figures for the net financial contribution of the states and local authorities as a proportion of the total receipts of social security schemes are as follows:[4]

Belgium	20.2
France	9.2
Germany	16.6
Italy	17.4
Luxembourg	26.3
Netherlands	5.0

A calculation for the United Kingdom would suggest that a comparable figure for 1966 would be 34 and for 1970 would be 30. (This covers Exchequer contribution to the National Insurance Fund, war pensions, family allowances and supplementary benefits).

It is probably in the field of social security that pressure for a harmonisation of arrangements will be first and most strongly felt in the Community.

Education

In the period 1950-65 educational endeavour, as measured by school and university enrolments, rose substantially in the countries covered by the EEC, as indeed it did in other European countries. It is significant though that in the case of primary and pre-primary enrolments (which are of course closely

[4] See *L'evolution des finances publiques 1957-1966*, pp. 155-6.

affected by changes in the birth rate) the increase was 13%—while at th secondary and higher levels the figures were 101% and 134% respectively.[5]

Throughout the EEC elementary education is compulsory from at latest 6 t at least 14. In many areas the legal age for school leaving is already highe —but in others the legal requirement of education to 14 is not fully effective There is in fact a marked tendency for schooling to be prolonged; the numbe of children who actually leave school at 14 falling year by year[6] and th age of leaving is generally nearer 16. Despite a growth in educational plannin in the last decade the statistical material leaves a good deal to be desired.[7]

Major considerations which may play their part in influencing educationa growth include:

(a) the strong and increasing demand for education expressed by pupils an their parents. The growth in demand has accompanied changes in th social structure and the rise in GNP per capita. It coincides with th need for a more highly educated body of citizens in a society which i growing increasingly complex. Those leaving school at the moment wil be active participants in industry, the professions, and the life of society until perhaps the year 2015, 2020—or beyond. It is manifest that th education which they now receive must fit them to deal with the many changes in industry and society which they will see.

(b) Recognition that education is an investment by society and that society is entitled to expect maximum benefits—compared with those which ar alternative use of the resources devoted to education might produce.

(c) The degree to which the educational system can provide in broadly th right numbers the individuals with the skill, and training which industry and society require in the future for the wide range of vocations open.

(d) The contribution which the educational system can make to a greate increase of social equality and equality of opportunity.

Within the education system individuals exercise choice subject to the legisla- tion of the country in which they live, and the wide variety of options which the educational system offers, so that a good deal of what is described as educational planning is necessarily concerned with forecasting educational expansion rather than influencing it. So far the strong demand for improve- ment in educational opportunities at all levels has coincided with the need of the nations of the Community for greater numbers of skilled and qualified individuals. It may be that in the future the relationship between economic, social and educational needs will become more complex. The plans of the countries of the Community appear to envisage an expansion rather than a diminution of higher education and this could lead to more graduates being

5 See *OECD Conference on Policies for Education Growth*, Vol. II, p. 11.

6 See *L'evolution des finances publiques 1957–1966*, p. 57.

7 See *OECD Conference on Policies for Education Growth* Vol. II, p. 77.

available than there are posts which have traditionally been regarded as appropriate to such a standard of educational qualification.

Such a situation may appropriately be regarded along the lines of (1) the social advantage to the individual and to the Community of generally higher educational standards. (2) The growth of occupations, e.g. in the fields of administration, social welfare and parts of industry in which the quality of performance will be raised by the employment of individuals of higher educational standards. (3) The reorganisation of parts of industry and administration so that work hitherto performed in a routine manner under supervision may permit more flexibility and more initiative by the individual.

The interaction of social, economic and educational needs can be reconciled along lines which not only permit to the individual the satisfaction of a higher educational standard but lead to social and economic advantage

Educational growth is likely to continue in the seventies. The traditional system of education with its élitist character is being transformed into a system of mass education—not without controversy. The following may be seen as likely fields requiring particular priority.

(i) Pre-primary education. The widespread changes in the character of primary education since the end of the Second World War have been perhaps the most dramatic of the moves away from an academic orientation and towards an educational system based upon developing the full range of the individual's abilities and talents. Pre-school education also has great significance in meeting the needs of children belonging to socially disadvantaged groups for whom much subsequent educational effort is likely to remain ineffective unless they are helped to overcome the initial obstacles to achievement.

(ii) Upper-Secondary Education. Taking the Community (and indeed the OECD countries as a whole) there has been a doubling of enrolment in upper secondary education between 1955 and 1965. For most European countries the continuation of this trend towards the full enrolment up to the 17-18 years age group would imply great expansion in total numbers. At their sixth Conference in May 1965 the European Ministers of Education formally stated their view:

"that the period of education should be extended to eleven or twelve years for alle and that education be based on a broad common curriculum."

The tendency of lower secondary education to become less selective, combined with the past and prospective growth of upper secondary education, will mean that the period of common educational experience for the whole population will gradually lengthen. This is socially desirable—in producing a more highly educated population and reducing those divisions which had their origins in varying educational arrange-

ments for different classes—and is also valuable as a foundation for academic, occupational and professional training.

(iii) Higher education including recurrent or "permanent" education. The number of students is likely to increase but the choices made by students for specialised fields of study have tended to diverge from those which would match the forecasts of demand for the various types of specialist. At the same time forms of higher education may change; already the old divisions are breaking down between academically oriented higher education in Universities and the more vocationally oriented education in other institutions. Indeed there is need to examine how the relationship of higher educational institutions to social requirements may be improved without prejudice to their independence. As the rapidity of social and technical change is recognised however the importance of permanent education will be increasingly emphasised. This form of higher education may prove to be one of the most substantial and significant areas of educational growth. Individuals will be involved in it irrespective of their attainment in the formal educational system; and it will assume a variety of forms—among them spare time courses perhaps covering a number of years; part time courses covering usually shorter periods and sabbatical spells of full time refresher education at intervals in working life.

At the same time—as in other developed countries—there are clear inequalities in the educational opportunity of individuals, marked both by regional differences within countries and by class differences. This is a complex subject but the scale and importance of it can be to some extent seen from the set of figures on page 349.

The OECD Conference on Policies for Educational Growth (held in Paris in 1970) provided the occasion for a number of countries participating to offer estimates of future enrolments. These are set out in the tabel on page 359 together with estimates made independently—by the OECD Conference Secretariat—on the assumption that the education system will develop in accordance with certain trends prevailing between 1950 and 1965. These Secretariat calculations do not take account of national forecasts or even of the likely effect of projected reforms now known; in each case they provide a range of forecasts of which in the table the minimum and maximum are shown. The national forecasts and the independent calculations both relate to total enrolments but the table also shows in brackets for each country the figure calculated for higher education. From this table therefore can be gained a general impression of likely growth in education during the seventies.

Countries have also put forward estimates of the enrolment rates current and forecast as percentages of the age groups concerned. The table on page 351 indicates the position for those Community countries which provided these forecasts and for the USA and Japan.

Relative chances of Upper Stratum and Lower Stratum Youth Studying in a University

	Date	*Upper Stratum*		*Lower Stratum*
Belgium	1962 – 63	7		1
	1966 – 67	8		1
France	1959 – 60	84		1
	1964 – 65	30		1
Germany	1952 – 53	82		1
	1958 – 59	61		1
	1961 – 62	58		1
	1964 – 65	48		1
Ireland	1961	20		1
Italy	1953 – 54	44		1
	1960 – 61	36		1
	1964 – 65	34		1
Luxembourg	1964 – 65	65		1
Netherlands	1958 – 59	73		1
	1961 – 62	56		1
	1964 – 65	45		1
Norway	1964 – 65	7		1
United Kingdom	1961 – 62	8		1
Japan	1952	20	:	1
	1961	30	:	1
United States	1958	5	:	1

Extracted from Table D (p 88) in Volume IV of *Background Documents for OECD Conference.*

Indices of Future Increase in Enrolments

	National Forecast and period	*Secretariat Calculations (1965 : 100)*
Belgium	125 (1966 – 1980)	110 – 130 (224 – 300)
France	129 (1967 – 1975)	101 – 131 (193 – 287)
Germany	—	118 – 147 (205 – 359)
Italy	150 (1966 – 1980)	116 – 180 (156 – 338)
Netherlands	125 (1967 – 1980)	118 – 164 (116 – 206)
Denmark	127 (1968 – 1979)	115 – 122 (159 – 169)
Norway	127 (1968 – 1980)	107 – 130 (208 – 297)
Ireland	145 (1968 – 1981)	119 – 137 (172 – 277)
USA	120 (1968 – 1978)	125 – 151 (167 – 270)
United Kingdom		189 – 179 (139 – 249)

The table is compiled by extracting figures from Table 6 of Annex IV and Table 18 of Annex III of Volume II of the *Conference Documents.*

Enrolment rates around 1968 and 1980
(as percentage of the age group)

		5 years	14 years	17 years	21 years	24 years
USA	1968	88(1)	98(2)	90(3)	31(4)	14(5)
Japan	1969	66(6)	100(7)	81(8)	24(9)	—
Norway	1968	—	99	57	18	10
Belgium	1966	100	87	47	13	6
	1980	100	98	66	19	14(5)
Denmark	1968	5	88	49	15	9
	1979	36	100	85	22	2
	1984	48	100	90	29–34	3
France	1967	99	85	40	10	5
	1975	100	100	54	13	7
Italy	1966	—	56	27	—	—
	1980	—	80	43	—	—
Netherlands	1967	94	91	35	9	5
	1980	99	100	68	20	8
Ireland	1968	72(6)	81	31	—	7(10)
	1981	78(6)	98	60	—	12(10)
Luxembourg	1967	90	95	27(11)	9	5

The table is compiled by extracting figures from Table 8 of Annex IV of Volume II of the *Conference Documents.*

(1) 5 and 6 year olds
(2) 14 and 15 year olds
(3) 16 and 17 year olds
(4) 20 and 21 year olds
(5) 22 to 24 year olds
(6) 4 and 5 year olds
(7) 12 to 14 year olds
(8) 15 to 17 year olds
(9) 18 to 21 year olds
(10) 20 to 24 year olds
(11) 41 with part-time students

From this table emerges a clear indication of the lag which on present intentions appears likely to exist in 1980 in upper secondary and higher education. Countries in the Community do not generally appear to expect to reach in these fields the ratio of enrolment reached now in the USA and in the upper secondary case, Japan.

While this analysis has of necessity been made in terms of the position and plans of individual countries there is a clear need for discussion on a Community basis which will establish reciprocal recognition of degrees and professional qualifications.

The achievement of appropriate social goals in education by 1980 (even on the basis of achieving national objectives currently foreshadowed) is likely to require an increase of the order of 100 per cent in the proportion of GNP which in the period 1966-67 was being devoted to education. Careful planning will therefore be needed, linked to evaluation designed to ensure that objectives

are attained by the most effective use of resources dedicated to the purpose. Such a perspective gives rise to comment on the availability of students, teachers and facilities (including buildings).

The first question which requires comment is whether society can bear the loss of productive manpower implied by a higher proportion of the members of each of a number of age groups being retained in full-time or part-time education. However with the accelerating rates of change in industry and in society a constant rise in the standard of education is a priority which must be accepted. The losses in direct productive power resulting from longer educational periods are likely to be more than made up by the benefits—even measured in higher industrial efficiency alone—which result.

Teachers represent only a small percentage of the labour force—although they represent a substantial proportion of the qualified professional manpower in a society. A development of the educational system creates its own increased supply of teachers—since students are potential teachers. While there may be need for examining specially the position of teachers in some subjects where shortages arise there can be no real anxiety that the expansion of education will founder through teacher shortage.

So far as building and equipment are concerned, while all appropriate steps must be taken to see both are used as intensively as possible, by sharing between institutions and making them available for other public and cultural use during vacation periods and in the evenings, there is again no need to suppose that the provision of the buildings and equipment required will put an impossible burden upon the countries of the Community.

Housing

There is no need to stress the fundamental importance of housing for a happy and healthy family life. There is still a chronic shortage of housing and much available housing is of unsatisfactory standard.

As with so many other desirable elements in a life of good quality however it is not easy to define what is ideal, for standards of aspiration vary from country to country and continue to rise. In general however the aim must be a supply of accommodation sufficient to ensure for each family a separate dwelling of adequate size with full range of internal facilities and with privacy; situated reasonably near the place of work; so located or so served by transport as to permit social contacts; and at a price which the householder can pay. In addition, special requirements of the elderly, of unmarried adults, of handicapped persons, of large families and of migrant workers must be recognised.

By world standards the population of the countries of the Community reckon

generally speaking as among the best housed; but nevertheless there exist inadequacies which necessitate a substantial effort in this field before conditions and the rate of progress can be regarded as acceptable.

The housing stock of individual countries is influenced by a number of factors, including past history, the demographic pattern and the changes which have taken place in it, and the distribution of economic activity. The war years, partly because of destruction and partly because of the interruption of new building, produced a widespread and acute housing shortage. The effect of this has been accentuated by a number of post war social factors, notably the insistent demand for higher standards. All governments in the Community countries have been obliged to take note of this and to ensure that public authorities assume a considerable responsibility for assisting in a wide variety of ways to increase and develop the housing stock.

It is not easy to give a general picture of the housing situation throughout the Community. For a comprehensive account on a comparable basis the UN report on Housing Perspectives in Europe (Geneva 1968) had to go back to last national census figures. These related to the early sixties—usually to 1960 or 1961. They showed as between the various countries of the Community variations from 3.1 to 5.2 in the number of rooms per dwelling; 3.0 to 4.0 in the number of persons per dwelling; 0.62 to 1.14 in the number of persons per room and 225 to 335 in the number of dwellings per thousand persons. There was similarly a range between countries in the proportion of houses with various indoor amenities. The percentage with piped water varied from 51.0 to 98.4 per cent; with indoor toilets from 39.9 to 91.7 per cent; and with fixed baths or showers from 23.6 to 77.4 per cent. Without doubt a table compiled on a basis which isolated figures for particular regions within countries would have shown a greater range of variation.

The house building effort throughout the Community during the post war years has been considerable. Its continuing scale may be judged from the last three years for which comparable figures are available.

	Number of houses completed			Number per '000 inhabitants			Percentage subsidised			Percentage of GNP devoted to housing		
	1967	1968	1969	1967	1968	1969	1967	1968	1969	1957	1968	1969
Belgium	47 000	47 400	57 300	4.9	4.9	5.9	44.6	53.9	51.3	6.1	5.6	5.4
France	422 500	411 000	427 100	8.5	8.2	8.6	78.0	79.0	77.3	6.8	6.9	7.0
Germany	549 000	519 000	499 700	9.2	8.6	8.2	34.7	34.5	36.7	6.2	5.6	5.2
Italy	267 900	271 000	283 100	5.0	5.0	5.2	9.7	9.6	8.8	5.9	6.4	7.5
Luxembourg	1 800	1 900	1 870	5.4	5.8	5.5	37.1	29.7	28.4	—	—	—
Netherlands	127 400	122 800	123 120	10.2	9.7	9.6	75.3	82.7	84.9	5.5	5.6	5.4

From Table 1 and Table 5 of Housing Statistic in *Expose sur l'évolution de la situation sociale dans la Communauté en 1970.*

Despite the efforts of the post war years however it was possible for the situation in the European countries to be summed up in 1970 as follows·

Even in countries where the interplay of the instruments of the private capital market and government policy, selective credit controls and/or direct regulation of the building market resulted in a rather positive development as in the Netherlands, Norway and Sweden, the achievements were not sufficient to cover the needs, especially if urban renewal is taken into account. This was even less the case in most other countries.[8]

It is not easy to assess the current need. The UN European Housing Report makes some calculations—which appear to be on a cautious and conservative basis. A table in this report (C. 6)—somewhat simplified—sets out the average annual housebuilding rate that would have to be achieved between the beginning of 1966 and the end of the period of estimate if both the estimated dwelling shortages and tentative future normative housing requirements were fully included in the house construction programme.

	Period of estimate	[illegible] requirement per '000 inhabitants	[illegible] '000s	[illegible] '000s
Belgium	1965 – 1984	6.2 – 7.9	5.3	6.2 – 8 0
Denmark	1961 – 1980	5.4 – 8.8	7.6	4.7 – 9.2
France	1962 – 1980	8.7 – 10.6	7.3	9.0 – 11.3
Ireland	1962 – 1971	4 6	2.9	5.6
Germany	1968 – 1975	8.0	10.2	8.0
Netherlands	1965 – 1979	9.1	7.7	9.1
United Kingdom (GB only)	1966 – 1970	17.0	6.3	17.0

Such a table might appear at first sight reassuring. It must however be borne in mind that the estimates of future housing need leave out of account some important factors. They include the demand arising from demographic forecasts and from the need to replace dwellings which are either no longer fit for human habitation (by the standards of the country in question) or likely to be demolished because of future economic or social needs; but they do not appear to take account of the continuing demand for higher housing standards.

[8] From summary and conclusion of paper *Some achievements and trends in housing in selected European countries and USA* prepared for EEC housing, building and planning Committee (HBP-HOU-42) November 1971.

A further indication of the future need may be gained from the following table.[1]

	Stock of dwellings '000s	% built before 1914	% built before 1945	Council	House building programme in middle term ('000s annually)
Belgium (1968)	3 493	47	71	400000 dwellings regarded as slums to be demolished. 600000 require modernisation.	60
France (1968)	18 256	47	72	7.5 m dwellings fall below elementary standards of modern comfort.	510
Germany (1968)	20 596	33	50	7 m dwellings need to be replaced or modernised.	500
Italy (1969)	16 822	—	54	Several million dwellings need to be modernised.	460 (estimate)
Luxembourg (1968)	106	—	60	—	2
Netherlands (1969)	3 687	28	54	350 000 dwellings regarded as slums. 250 000 require improvement.	125/130
United Kingdom (1969)	18 488	approx. 35England 46Wales		2 m dwellings categorised as slums; 2 m more lack essentials such as bathrooms and indoor toilets.	355–380

Source: From *Table of Preliminary Guidelines for a Community Social Programme;* United Kingdom figures added from U.K. sources.

This suggests that of a total housing stock of just over 80 million some 25 million must be regarded as in need of improvement or replacement.

This may be set beside the housing target announced for the United States in 1968—the construction of 26 million dwellings over a 10 year period. This target was equivalent to a 40 per cent increase in the housing stock taking account of demolitions during the period in question. It was recognised too that to meet this target would require a much more substantial degree of public financial aid than had previously been available.

Perhaps in all the best guide is to take account of the observations about the future included in the UN Survey (which of course embraced a wider range of countries than the Community).

"It has emerged from the findings of the study that no country has yet attained a standard of housing which it could regard as sufficient or satisfactory. Moreover practically no country has achieved a house building rate in the recent past which would be high enough, or at least relatively near to that which would be desirable, to meet estimated future normative housing requirements and to eliminate dwelling shortages over the period of estimate (i.e. normally by 1980) . . .

These stark facts make it strikingly clear that the existing housing problems cannot be easily solved during one or two decades, and that as soon as housing requirements estimated at present have been met, other and new housing needs will emerge. The main concern in any country should be, given its particular circumstances, to raise housing standards for all groups of the population as high and as quickly as possible . . ."

In recent years there has come to be increasing recognition of the part which the modernisation and improvement of existing dwellings can play in efforts to raise standards of housing. In the United Kingdom for example the 1969 Housing Act greatly increased the grants which may be paid to enable owners of houses which are basically sound but which lack some of the essential amenities to install such amenities and bring the houses up to a good standard.

Similarly the EEC launched in June 1970 an experimental two-year project to rehabilitate old houses as part of the programme for improving housing of ECSC workers. It was pointed out that a programme on these lines would have housing effects similar to new building since it would raise the proportion of the population who have satisfactory living conditions. The immediate intention was to mount in each country concerned two or three operations each covering about one hundred houses. Radical improvements would be made in order so seek new technical methods of doing such work based on the application to house improvements of rationalised and industrial methods.

If the experiment proves a success the methods devised will obviously be of wide application.

Two other major considerations must be borne in mind in any discussion of programmes—particularly of new construction. The first is that of cost to the house occupier; the second the relationship between housing and environmental planning.

It has been a widespread experience, at any rate in developed countries, that a measure of subsidy is necessary to ensure even moderate standards. The forms of subsidy are very diverse; they include direct payments from national or local tax resources to enable houses to be let below the cost of building and maintaining them; capital for house building made available at artificially low rates of interest either to individual house purchasers or to public authorities which provide houses for rent; disregard for income tax purposes of income devoted to paying interest charges on house purchase; and so forth. Indeed it is asserted that in a large number of countries 80-90 per cent of new construction attracts direct or indirect public aid.[9] The figure given above of houses built during 1967-1969 show that taking the EEC countries as a whole, almost 50 per cent of the houses built in each year were subsidised.

Rising standards of housing, rising interest rates and rising cost of land have made the situation more difficult. During the sixties a number of countries relaxed the controls upon rent levels which previously existed—although generally speaking the relaxation of rent control has been accompanied by new measures of assistance to poorer tenants. But, even with the various measures indicated above, adequate housing absorbs so high a proportion of the expenditure of many low income families as to constitute a severe burden. Some substantial subsidisation of housing from the funds of public authorities —whatever form it may take—is likely to continue for as far ahead as can be foreseen.

Further a home provides for a family not merely shelter. It must be provided with services and must form part of a community in which children can be educated, employment for the family wage-earners can be found and all the other apparatus of social life is available. Thus housing must be considered in relation to town planning and control of land use. This raises wide issues of improvement of the environment.

Comprehensive Social Provision

The items listed so far do not exhaust the requirements of social provision. One additional field for example is that of the prevention and treatment of crime. This subject has connections with education, health and welfare services; it raises issues of prevention, law enforcement, custody and rehabilitation; and it involves directly the maintenance of a whole range of police,

9 ICFTU-IFBWW study: *The housing situation of low income groups* 1970.

prison and probation services, and of institutions for the handling of the inadequate, the delinquent and the criminal. A society is distinguished by the services which it needs and provides for those who deviate from its norms of honesty and peaceful relationships with others; to find ways to ensure that a child, adolescent or adult shall be rehabilitated rather than confirmed in a life of crime constitutes a clear gain in human fulfilment, as well as a saving of the cost which society will otherwise inevitably incur. A comprehensive and forward looking programme is likely to involve the rebuilding of many prisons and other custodial institutions, the development of new methods and higher standards of selection and training of staff.

Equally there would be scope for examining the future needs of the peoples of the Community in the fields of recreation and leisure Such an examination would raise issues of the future pattern of work and incomes, transport developments and the preservation of leisure and recreational areas.

However, what has already been set out in respect of health, social security, housing and education gives a broad indication of the scope for advance in social provision and indeed the necessity for such an advance on a wide front. Yet it is clearly difficult to assess the needs or chart the future with precision. In housing for example the standards sought constantly rise, in health and education there is vast scope for further action—but room for genuine differences of judgment about priorities and about the most effective methods of achieving commonly accepted aims.

In all the major fields the assessment of future requirements which have been attempted have been influenced to varying extent by the power which individuals have. This is true even where a substantial assistance—through public expenditure or mutual organisations—is provided. Once a service is available more cheaply—or even free—needs which have not hitherto been expressed are likely to make themselves known.

The principle for which we must strive is that provision—in education, health, social welfare, and housing—must increasingly be made on the basis of human needs, the recognition of individual dignity and the entitlement of each man or woman to achieve his or her full potential. Such principles imply, for example, a greater acceptance of equality of education; a standard of housing accommodation required for human dignity below which no family or individual shall fall; and health, welfare and social security systems which embrace all on the basis of right rather than of ability to pay, contribution qualification, or eligibility for some particular insurance scheme. The acceptance of such general aims will lead over a period to harmonization of social provision throughout the Community.

In effecting social progress no country can stand still until others have in a particular respect caught up with it; so that the concept of European stan-

dards, bringing all up to the level of that which in a particular field is regarded as the best, is not a useful guide to immediate action. There is in many cases at present room for debate about which standard is the best.

In education, housing and health there is therefore need for the greatest interchange of experience and of ideas, and for each country, according to its own priorities and problems, to increase the proportion of its effort directed to social improvement. The promotion of common recognition of qualifications and the organisation where appropriate of joint initiatives between two or more countries can contribute to this. From such exchanges will develop a tendency to harmonization of practice and standards upon the basis of the best. The Community institutions can play a coordinating role. In social security schemes the progress towards harmonization may well have to be more rapid and the role of the Community institutions more positive.

While a definition of precise aims covering the whole Community may be impossible at any rate at present, there can be no doubt of the needs for acceleration of the pace of social advance. The contrast between mankind's achievements in such fields as space travel and the failure to meet human requirements in many mundane respects has become so sharp as to make delay more and more difficult to bear. Men and women will no longer accept the old inequalities and inadequacies.

Economic infrastructure and protection of the environment

In addition to social provision there are two further sets of communal requirements which in general the market has proved unable to meet. These are the elements in the economic infrastructure—among them transport services, communications and some sources of energy—and the elements of a satisfactory environment—such as fresh water, pure air, freedom from noise and congestion. Both these sets of communal requirements must be met if society is to develop in a balanced and healthy way.

The importance of the transport services for European integration has been recognised since the foundation of the EEC; but progress in developing a coordinated system has been less rapid than was hoped. It is becoming necessary to consider this subject on a wider basis; since a series of important technological possibilities will influence the ways in which European transport services develop. What is the scope of advanced passenger trains? of hovercraft and hover-trains? of a vertical and short take-off aircraft system for Europe? What moreover are the likely effects of developments in telecommunications and computers upon the future transport requirements of Europe? For example do such developments presage such fundamental changes in, for example, the organisation of a large office or in the relationships in space between a controller and the operations he is controlling as to affect the problem of com-

muter traffic in large cities? Again, what are the future requirements of Europe likely to be in respect of telecommunications services themselves?

At any rate, it appears that in the economic infrastructure we are concerned with a class of communal requirement where central planning and decision are likely to be required more urgently than in the field of social provision. The sums of money required for research and development will be very large; decisions in respect of the various aspects of communications can hardly be taken in isolation from one another. The concentration of population and transport facilities in Western Europe is so great that it would be virtually impossible for the countries to take their decisions upon future communications issues separately.

The problem of the protection of the environment has come more recently and more rapidly to the centre of public attention. Pollution of water and air, together with excessive noise, congestion and strain, have come to be recognised as undesirable consequences of rapid economic growth. Already the outlines of a policy have been set out in the first Communication of the Commission on the Community's Policy for the Environment. A coordinated effort of great dimensions will be needed partly because of the size of the problem, partly because many of the problems of the environment of their nature involve the disregard of national frontiers, and partly because the requirements upon industry to apply standards which ensure non-polluting products will not be imposed speedily and effectively at a national level if they seem likely to put the manufacturers of the country concerned at a relative disadvantage. Hence it is clear that in this sphere the instructions of the Community will play a substantial part.

Space does not allow the requirements of the economic infrastructure or environmental protection to be discussed at length especially in view of the degree to which they are covered in other papers; but in a consideration of communal requirements the problems to which they give rise must be borne in mind along with those raised by the needs of expanded social provision.

The implications for industry

An examination of the main fields of communal requirement involves the need for the maintenance and indeed the acceleration of industrial growth. This renders more possible both the diversion of a greater share of real resources to education, health, housing and social welfare and progress in redistribution of spendable income. It must however be growth conforming to new conditions —especially in respect of avoidance of pollution of the environment and consistent with regional development—and directed to new ends.

The allocation of resources of manpower, capital and managerial skill between

various purposes is constantly changing. It is not possible save in the most general way to indicate how the size of various industries may be expected to change in the next ten years, given policies pursued throughout the Community which emphasise greater social provision and more attention to the improvement of the economic infrastructure and of the environment. Redistribution of income will mean expansion of industries producing consumer goods—foodstuffs, clothing, furniture and domestic equipment; larger programmes of school building and house building (and renewal) together with extended hospital and health centre provision may tend to change the emphasis in the building industry from industrial and commercial construction; an expansion of health, educational and welfare services will necessitate the training of a higher proportion of teachers, doctors and medical and social auxiliary workers. These however are no more than obvious trends which can at present be indicated in the broadest way and which are likely to be manifest at the national rather than the Community level.

One key—if not the key—to changes in the rate and direction of economic growth is to be found in technological advance; and it is by new directions for technological advance that a programme of emphasis on communal requirements is likely to be assisted.

At present however there is a scepticism about technology as profound as the scepticism about growth. As with growth the criticism should be directed not against technology but rather against the way in which it has been used.

Much research and development is of course privately and not publicly financed. Indeed company financed research and development has consistently grown because it can contribute to economic success. When all research and development, however financed, is taken into account the predominance which is now being assumed by spending on purposes other than defence and prestige can be seen.

During the fifties and early sixties much of the emphasis in technological progress—particularly as measured by the expenditure on publicly financed research and development—was, in almost all advanced countries, on projects which contributed little to meeting human needs; the emphasis was on defence, space and nuclear projects. By the end of the sixties however it had come to be put to a greater extent on economic, agricultural, welfare, environmental and similar purposes.

The shaping of industrial development which social considerations require will be assisted by continuing the change in emphasis of Research and Development towards satisfaction of genuine consumer needs and the promotion of welfare, safety and environmental improvement. To some degree the Research and Development effort in private industry—as exemplified particularly by the work of Research Associations—already takes account of these needs; but not yet to a sufficient degree.

Percentage of Gross National Expenditure on Research and Development by Main Objectives (1967)

	National Security and Prestige	*Economic Development*	*Public Welfare*	*Other*
Belgium	5	68	11	16
France	41	43	5	11
Germany	21	62	7	10
Italy	16	60	10	13
Netherlands	4	70	10	15
UK	30	56	5	9
Denmark	8	59	17	16
Ireland	—	84	5	11
Norway	11	58	12	19
USA	55	32	6	7

Figures extracted from table in paper *The Goals of Research and Development in the 1970s* (published by Science Policy Unit of University of Sussex 1971) based on OECD Statistics 1971

It is unlikely that the change in emphasis will be effected by normal market forces. The interests of consumers are generally too weakly organised for this; and indeed in a number of cases, as already indicated, there is not yet nor is there likely to be a sufficiently clear consumer demand expressed through the normal forces of the market. The change of emphasis in industrial development and growth which a programme of meeting communal needs necessitates will depend on the use of collective regulation and initiative. Methods of public procurement will have to be used to further the direction of Research and Development towards projects specially addressed to the needs of lower income groups and to other social aims. Similarly positive public action by the planning of Research and Development contracts will be necessary to secure increasing attention to problems of communal needs. In some cases this will involve national action; but in other fields close technological cooperation on a Community basis—which has so far made relatively little progress—will be required.

To these subjects the proposals for the creation of Community Industrial Development Contracts are very relevant. Such contracts are not a substitute for the efforts of industrialists or of separate Member States. They can, however, as at present envisaged, serve one of two purposes. The first is that of providing development with the aim of raising efficiency in industry—particularly in the sense of industrial cooperation and integration between the countries of the Community—and facilitating its adaptation to the social aims of

economic development; the second that of promoting development proje[illegible] related to goods or equipment which will meet a public need—defined [illegible] Community level—but which are not produced in response to market forc[illegible] alone.[10]

Elements in a Social Strategy

The foregoing sections suggest that to assist the achievement of the objectiv[illegible] quoted from the Third Medium Term Programme will require a willingness [illegible] change attitudes, adopt new policies and modify institutions. It will require [illegible] new consciousness of the intimate ways in which social and industrial poli[illegible] continuously interact. It will require not only the maintenance, even t[illegible] acceleration, of economic growth, but also a radical change in the ways [illegible] which the results of that economic growth are put to use.

(1) The accepted objectives in the major fields of social policy—educatio[illegible] health, housing, welfare, social security and distribution of income—need [illegible] be reviewed (even where the objectives are at present implied rather tha[illegible] explicit ones) so that an assessment may be made of how far the progre[illegible] envisaged over the next ten years is adequate. Such a reassessment must em[illegible] brace not only an examination of how far the resources which are at prese[illegible] explicitly or implicitly earmarked for these purposes are adequate or should b[illegible] larger, but also an examination of the principles on which these resources a[illegible] to be used. Thus in education, to take an example, it is not merely a questio[illegible] of asking whether the expected rate of enrolment in 1980 is large enough bu[illegible] also whether within the programme of educational expansion enough emphasi[illegible] is put on the diminution of present inequalities of opportunity.

(2) The objective must be a clear one—that in framing future policies th[illegible] emphasis be put not on growth for its own sake, nor on the enhancement o[illegible] prestige, but on the creation of a society which is genuinely designed to cate[illegible] for individual human needs and to give the fullest scope for individual huma[illegible] development.

(3) Some of the work of reassessment must be done in industry itself. Her[illegible] the most important steps are the encouragement of a higher living standar[illegible] for workers and of greater influence by them on the control of their workin[illegible] lives. A striking feature of advanced industrialised societies over the last fif[illegible] teen to twenty years, no less than of the developing societies, has been th[illegible] "revolution of rising expectations". Men and women are constantly reminde[illegible] of the advances of science and technology; they are subjected more system[illegible] atically than ever before to sophisticated advertisement pressure—particularl[illegible]

[10] See *Memorandum on the Creation of Community Industrial Development Contracts*, EEC Brussels 15.10 1971.

in those countries which have commercial radio and television—designed to encourage them to acquire a wider and wider range of goods. It is hardly surprising therefore that they should expect to see science and technology making possible a standard of living which improves in real terms year by year.

(4) In order that this desire may be articulated and constructively expressed all practical steps should be taken to encourage the development of trade unions and their recognition by employers. The primary drive in this direction must of course come from the trade unions themselves. Since the most satisfactory way of conducting industrial relations is on the basis of collective bargaining between employers on the one hand and strong representative trade unions on the other, trade union organisation should be facilitated and employers encouraged to accord recognition Unions should also be ensured a more substantial position vis-à-vis the formal European institutions and in appropriate ways the principle accepted that workers should have through their unions a place in industrial affairs which assures them an effective influence on the whole range of matters with which industry is concerned.

(5) In the field of social policy a greater emphasis should be placed on the involvement of the public in all matters of concern to them—consideration of plans for the development of particular areas; administration of hospitals and other health institutions; participation by parents and teachers in the reshaping of education; and so on.

(6) The social purpose of industry will be strengthened if more attention is given to protection of the consumer; not only by legislation and inspection where that is necessary, but by the encouragement of organisations of consumers who may establish or control facilities for the testing and evaluation of consumer products.

(7) A profound influence can be exerted on industry and society by the change of emphasis of research and development. The US declaration in the early sixties that it would before the seventies place a man on the moon caught public imagination and provided the spur for an immense programme of research and technological application. There is much to be said for a Community commitment to a series of equally bold declarations about goals to be achieved by given dates in the future. Such goals however must be ones much more clearly related to human needs or to environmental improvement—designed, for example, to achieve a given housing target throughout the Community or to free all its waterways of pollution. Such commitments have dangers since they may divert effort and resources from other equally valuable purposes; but a balanced programme of such declared social and environmental goals, always provided that their human purpose was clear, could give a focus to technological and social aspirations.

(8) As a counterpart to such a declaration of goals there would be equal

advantage in establishing at Community level an institution—as recommended in the OECD Report "Science, Growth and Society"—which "would be responsible for anticipating the likely effects, threatening or beneficial, of technological initiatives and developments".

(9) There are gaps in social policy and administration which could be identified and filled. In respect of sickness, unemployment and pensions, events may force a greater degree of simplification and uniformity to reduce the complexity of accounting. Attention needs to be given both to the possibility of provision being comprehensive, covering all inhabitants of the Community and filling any gaps in coverage; and to the degree to which the financing of such schemes by a greater contribution from general taxation, along with the contribution income from employers and employees, can have a valuable redistribution effect.

(10) In education, health and housing professional qualifications need to be harmonised. The maximum exchange of information between countries of the Community can lead to better definition of aims in these fields of social policy and evolution of the best methods of achieving them. This can lay the basis for general advance and progressive harmonisation. The appropriate institutions of the Community can play initially a coordinating role but will increasingly themselves stimulate improvement.

(11) Special importance attaches to educational advance and the concept of lifelong education. This relates also to the need to ensure adequate industrial programmes of training—and of retraining as the needs of industry change. The success of programmes of vocational and general education in adult life will substantially depend on industry recognising the need to cooperate in releasing and reabsorbing men and women in accordance with such programmes.

(12) The industrial policy will require institutions of the Community with powers of supervision and initiative. The form of these institutions—and how far those already existing can be adapted for this purpose—will require examination. It will, however, be essential for such institutions to have the confidence of and involve the participation of the social partners.

Chapter IV of the document Preliminary Guidelines for a Community Social Policy Programme discusses the scope for the implementation of such a policy through the institutions of the Community and the ways in which financial resources can be made available. It also sets out a programme of priorities which provide a basis for discussion and decision. Immediate steps can best be determined in the context of action to draw up a Social Budget of the Community and to formulate as speedily as possible a "medium term social forecast" at Community level.

So far as other priorities set out in the document are concerned greater emphasis might well be given to the following points:

(a) the importance of regional planning and of full employment policies as a means of ensuring the spread of employment opportunities and the minimisation of such movement of workers as may have detrimental personal or family consequences;

(b) the achievement of higher real wage standards and better working conditions (together with the identification of areas of low pay and poor working conditions) by the encouragement of collective bargaining over a wide range of subjects;

(c) in connection with improvement of health and safety standards a consideration of the effects of work of a repetitive and monotonous character;

(d) improvement not only of working conditions and relative remuneration of women but study of the ways in which their opportunities, particularly in the field of education should be widened.

(e) measures for promoting the integration of handicapped people into active life, to be seen not merely in terms of possible employment—important though that is—but also in terms of the most rewarding human contacts and constructive community care for all categories of handicapped and disabled;

(f) steps to identify groups and areas where for any reasons the provision of health care, educational facilities and social security arrangements fall below the general standard;

(g) consideration of the possible announcement of goals in the field of social and human improvement for which dates might be fixed so that the emphasis of technological advance and social administration on the meeting of human needs can be the more clearly seen.

THE CHANGING COLLECTIVE AND INDIVIDUAL NEEDS OF EUROPEAN SOCIETY(*)

G. RUFFOLO

Economic growth and the quality of life

1. One of the most distinguished casualties of May 1968 was undoubtedly the GNP (gross national product).[1] This idol of economic success, which was burned in the squares of Paris, has since been rehabilitated as far as possible, but it is no longer the same. Faith in the fallen god has been shaken. The optimistic belief in economic growth which has marked the last twenty years, is now giving way to equally uncritical and mystical pessimism.

In twenty years, national product per capita has doubled in the countries of the European Economic Community. If the quantity of goods produced were a true indicator of social well-being, we should now be living in a Europe twice as prosperous and twice as happy.

This is not so. European industrial society, shaped by twenty years of economic progress is incomparably more affluent than the society which emerged in confusion from the ruins of the war; but it is no longer human or rewarding.

2. The economic progress of Western Europe has been enormous in many respects. For twenty years the EEC countries have maintained something like a 5 % growth rate in their national product; in comparison, the United Kingdom's figure of 3 %, which would have seemed miraculous during the inter-war years, is almost shameful. Almost full employment has been achieved in virtually every country. The real income of workers has increased by an annual average of around 7 %. There has also been a considerable measure of stability: the general level of prices has risen on average by about 3.5 % per annum. There have however been steeper increases over the last few years.

From the economic standpoint, the last twenty years have been a golden age for the Continent.

Between 1968 and 1970, however, the spectres of a forgotten past have reappeared on the horizon. They include inflation, the international monetary crisis, and the upsurge of social unrest. A feeling of malaise is disturbing men's

(*) Translated from the Italian

1 I prefer to use the English initials. Every religion has its own jargon.

consciences and is casting doubts on the experts' optimistic forecasts for the next ten years which are presented as a mirror image of the last decade.[2]

The econometricians are therefore neither worried nor wildly optimistic. Not so the man in the street who is beginning to wonder what these indices and figures really mean.

At the end of last year,[3] the Economist published a semi-serious table. The chief countries of the world were ranked in a single list based on twelve social indicators, which were either "positive" (e.g. the percentage of seventeen-year-olds still at school) or "negative" (e.g. the percentage of road deaths).

Among European countries, the United Kingdom had the highest social rating (+8) but the lowest economic performance (0); at the other end of the scale, *Italy had the highest economic rating (+7) but the lowest social performance* (—15).

It goes without saying that these figures are arbitrary and misleading (particularly in this semi-serious form of generalisation). I shall return to this point later in my paper. At the same time, it cannot be disputed that the national accounts are becoming an increasingly unreliable indicator of prosperity and even more so of happiness While Pigou's "law" that general well-being increases with economic prosperity could reasonably be accepted in times of general economic scarcity, this proposition becomes increasingly doubtful when, as more goods are produced, more of other kinds have to be made to remedy the damage caused by the first, and the process continues in a sequence which seriously threatens the sources of human life and the mental stability of all mankind.

3. In short, the outward signs of economic well-being are increasingly offset by signs of social ills.

It is quite useless to ask whether the ills of our society are greater or less than those of the African races, who are not exposed to pollution, or of the country-dwellers of the 18th century, who were not a prey to mental illness.

Every society has its own special troubles No weighted index has yet been invented which can measure them in absolute terms. In every society there are those who regard such evils as the necessary and even acceptable cost[4] of the attendant, overriding and inherent advantages (Paradise or the GNP), on the other hand there are those who seek to reduce and combat these evils.

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[2] Recent OECD forecasts anticipate increases of 5 2% for the 'small' Community, 3 2% for the United Kingdom, 4.2% for the United States but 10% for Japan.

[3] 25 December 1971

[4] In this connection, see the 'open enthusiasm' for the happy confusion of Las Vegas, attacked by Maldonado in *La speranza progettuale*, Turin, 1970, pp. 114 et seq.

All the ills of modern industrial society can be traced to a single commo factor—uncontrollable development. Industrial society has achieved the ir credible *tour de force* of continuously increasing the technical and economi resources at its disposal. It has not yet succeeded in planning this growt deliberately or rationally.

The evidence of this shortcoming is now obvious in the Western Europe of th seventies.

4. First and foremost, Europe seems to be incapable of spreading economi growth evenly over *its various regions and of narrowing* the gap between th different levels of society.

Over the last twenty years of economic growth, the inequalities between th different regions of Europe have unquestionably increased. Despite the effort made particularly in Italy and the United Kingdom to help Southern Italy, an Northern Ireland and Scotland respectively, these peripheral regions are sti depressed. To a lesser extent, all the areas to the west, east and south of th "golden quadrilateral" bounded by Milan, Paris, the Midlands and the Ruhr have lost and are still losing economic importance to these high-pressure areas There is still a large dose of unhealthy laissez-faire in the location of economi activity.

It is obvious that, so long as *firms are completely free in* the matter of loca*tion, the tendency to concentrate will become* even stronger and the economi and social imbalances between *the* various regions of the Continent will be come worse.

As regards incomes, it would seem that the trend towards a fairer distributio which marked the period from 1920 to about 1950, was halted shortly after wards.[6]

In a world where all incomes are rising, everyone has higher aspirations an social differences become more and more frustrating. This situation is perhap less immediately explosive than a sharp division between a few well-to-d and masses of poor; but there is more "creeping" social jealousy, encourage by the continuous stimulus of advertisements and the powerful example o ostentatious consumption.

The final consequence is that poverty, which has ceased *to be* general, is nov concentrating in intractable social areas, many of which are the preserve o foreigners and immigrants.

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[5] See J. Pinder. *Economic Growth, Social Justice and Political Reform* in AA. vv. Europe tomorrow, 1972

[6] J. Tinbergen, *Population*, ibid. page 74.

It would seem that the richest societies cannot do without these ghettoes where the rejects of prosperity accumulate.

5. Huge city growth is *another manifestation of the* entropy and of the *high* degree of disorder and disorganisation which accompany uncontrolled development.

No matter how this phenomenon is plotted on the map of Europe (golden quadrilateral, Lotharingian axis), North-West Europe is unquestionably becoming a densely-populated "strong" area, with a marked tendency towards faster city growth.

The conurbations of the Midlands and South-East in England, round Paris in France, in Rhineland-Westphalia and along the Rhine in Germany, in Switzerland and in North-West Italy form a potential European megalopolis, with a population which has already reached about 150 million. This very-densely populated area (about 460 persons per square km already) forms the most powerful magnet to both population and economic resources in Europe. If its power of attraction is not reduced, the European megalopolis of the future will be the undoubted equal of similar concentrations in Japan and along the north-east seaboard of the United States.[7]

It is estimated that 30% of the population of the European Economic Community is to-day concentrated in 9% of its area

If the present trend continues, this figure is likely to rise to 40% by 1990. Quite apart from the gradual decay of population and of economic growth in the areas outside the "megalopolis", to which reference has already been made, this would mean increasing congestion and a decline in the quality of urban life inside the metropolitan area.

On any objective view, living conditions in our cities are being increasingly *dominated by the workings of an* absurd fate. The facts, for example, that streets are being increasingly used to park vehicles instead of a means of speedy and comfortable transport, that the cost of such parking is rising continuously (it has been estimated that the capital outlay for each parking space is about 70 million lire) and that, despite all this, motor vehicle sales are still rising rapidly, are symptomatic of how the public are losing control of their cities.

6. There is an even greater danger of men *losing control over their* environment. The "snare of entropy" as Kenneth Boulding calls it, is perhaps less

[7] See *Vers une 'megalopolis' européenne?* in D P No. 43 (11-71) See also *CEE· Travaux du groupe 1985-2000 – Urbanisation* May 1971, and Philipponeaux· *The environment in Europe to-morrow'* op cit

apparent in Europe, which now depends on the other continents for most of its raw materials. But the trapdoor of pollution is already open.

The broad stream of history down the centre of Lorraine has already transformed the gold of its legends into mud. The same threat hangs over the Mediterranean coast. The still green forests of the North menaced by the spread of the urban fungus. What is more, vast areas which are abandoned by an over-hasty agricultural industry, are invaded every weekend by people from the cities, who are trying to get away and leave behind them the fumes, dirt and din of the city.

There are, of course, some people who laugh at those who talk of ecological disaster and say that this is a new form of milennary pessimism as the year 2000 draws near. Or that it is the aristocracy again expressing its contempt for mass democracy.

In other words, the battle for the environment, as for the nuclear threat—which is now out of fashion—is between hawks and doves.

One side argues that progress must have its way; the other forms pressure groups and calls for bans.

But organised planning of environmental resources, laying down the terms of a balanced solution, is still in its infancy.

7. The lack of balance in the economy, the location of industry, city growth and the environment is closely linked with the fundamental political imbalance of industrial society, whose institutions are incapable of meeting its desire to participate. This is the real nub of our social ills.

Economic growth has itself created the demand to participate through the unprecedented mobilisation of social forces; of young people, enrolled for mass education, of women, now semi-emancipated from the home, of citizens, flung together in huge urban concentrations, of workers, exposed to the stresses of continuously-changing processes and the uncertainties of mobility.

It is only a half-truth to interpret this demand for participation as a demand for social services. This is only a partial statement of the issue. There is a danger of presenting the problem as one of reallocating economic resources between private consumption and the satisfaction of collective needs (which can be solved by raising taxes for example) and not as a problem of structures and the distribution of power in the community. This brings me to the heart of my subject.

The growth of social expenditure

8. Galbraith's ideas are well known. He argues that in a situation where economic resources are relatively abundant, we continue to live as in conditions of scarcity, and give the production of goods and services for the market—for the satisfaction of our personal needs—a priority which they have lost, now that everyone lives above the subsistence level; we ignore our higher needs, predominantly of a collective nature, which cannot be satisfied by goods produced for sale but only by social services *organised by the State.* The result is the paradox of public squalor in the midst of private affluence, and this affluence is the more illusory the more it is based on the invention of non-existent needs and useless frivolities.

This happens because, in our market economy, goods which can be sold to the public have a strategic advantage, since their market price automatically provides the income which "commands labour, capital and raw materials for production".[8]

Failing outside intervention, private production can therefore monopolise all the market's available resources. To prevent this from happening and to make some of these resources available for public services, laws have to be passed and institutions independent of the production process have to be set up. In other words, the market is the rule and State intervention is the exception.

In these circumstances, the supply of public services cannot compete with the supply of private goods and services. A "Social imbalance" is created between the number of cars produced and the space available for them, between tourist services and road safety and so on. The imbalance is aggravated by the fact that the coefficients linking private consumption and public services are tending to rise.

Galbraith's problem is to build into the system some kind of machinery to restore structural balance; for example, "a taxation system which will automatically make a percentage of increased earnings available to the authorities for public use".

But is the problem of social ills in an affluent society really a matter of increasing taxation to meet the demand for goods and services for collective use; or in other words of increasing social expenditure to meet social demand? Or does it depend on the logically preliminary, and *politically more* complex, problem of creating social demand?

Before to answer this question, we must first consider the relationship between the growth of social expenditure and of the gross *national product.*

[8] J. Galbraith, *The Affluent Society*, 1958 page 320.

9. Figures taken from a study made by the *Centro Studi e Piani Economici* (Economic Research and Planning Centre) on the trend of social expenditure in a number of industrialised countries will be found in the appendix.

Some of the terms used require a brief explanation. Public investment means gross fixed capital formation as normally used in Government accounts. Public consumption is also the concept used in the national accounts. However, while housing is reckoned as a public service, both because public management and financing of housing are increasing in many countries and because of the purpose of the service, a new aggregate has been introduced; in the classification used for the Italian economic plan it is defined as the social uses of income.

The concept of public interest will, however, have to be further expanded to allow for current appropriations of income for social purposes (contributions to health services, insurance payments, etc.) with the inclusion of such transfers, we arrive at the concept of social expenditure. This gives an idea of the overall resources mobilised in a particular country to meet predominantly social needs, as distinct from individual requirements or directly productive investments. Incidentally, under the heading of "social expenditure", the distinction between consumption and investment loses much of its significance.

The figures in the appendix clearly show that from 1959 to 1969 social expenditure tended to rise faster than the gross national product in virtually all the countries studied, the share of social expenditure in national income rose from 32 to 43% in the Netherlands, 31 to 41% in Sweden, 34 to 39% in France, 34 to 38% in West Germany, 31 to 38% in Italy, 30 to 36% in Belgium, 27 to 35% in Norway, 31 to 34% in the United States, 27 to 32% in the United Kingdom and 24 to 29% in Denmark. In Japan only, the figure remained practically unchanged at around 22%.

The tendency of social expenditure to rise faster than income extends, in general, to all components of the aggregate i.e. public investment, public consumption, housing (and, therefore, "social uses") and current appropriations. Elasticity is almost always greater than 1.

While aggregates of this kind, covering such a short period, cannot be regarded as highly significant, they do indicate a clear tendency to channel more resources to the provision of social goods and services.

This would suggest that the real problem is not the appropriation of resources from individual to collective uses but rather the way those resources are employed. The expansion of social expenditure derives its impetus from the same source as the growth of private consumption. But this expansion is so chaotic, unplanned and subordinate to "private" demand, that costs in terms of

resources used per unit of service provided are rising and the quality of the service is tending to deteriorate as its scale increases.

The quantitative growth of social expenditure conceals a rise in its costs instead of reflecting an improvement in the quality of the service provided.

10. The uncontrolled growth of cities, as a result of decisions left mainly to private enterprise, involves rising social costs for building and transport.

It has been estimated, for example, that if the trend towards urban concentration which has marked the last twenty years continues, the rate of building will have to be doubled from 1 to about 2 million dwellings per year over the next twenty years in the countries of the European Economic Community.

The educational system has felt the impact of industry's demand for skilled workers and of the entry of massive new waves of students, due to the increase in personal incomes. In every country in Europe, expenditure on education has risen steadily by an average of more than 10% per annum. Numbers at school have increased. But both fixed costs and current expenditure on education have grown faster than the service provided. To judge from recent experiences, moreover, education cannot be said to be greatly "enjoyed" in most European countries.

Much the same may be said of the health services. In Western Europe, all forms of expenditure on these services have risen swiftly almost everywhere (direct payments or appropriations and the overall percentage is now somewhere between 5 and 10% of national income. Here again, the increase cannot be said to have been deliberately planned on the basis of research into the *state of health and the needs of the population*, but rather a hasty and anguished response to pressure from private demand, the general public and the medical profession. In every country, the cost of health services is rising to a greater or lesser extent.

On the other hand, expenditure on *conservation and urban reconstruction* is still on a very small scale. There is no basic pressure from "private" demand to give the necessary impetus; and, like other races and peoples throughout the world, Europeans seem so far to have taken an implicit decision to let their geography and history go by the board.

I think it is fair to say that social expenditure has been increasing and will continue to do so, not in opposition to the growth of "private" demand, but as an indirect and minor consequence of that growth. The real problem is not how much money must be diverted to collective needs by more automatic tax deductions. The enormous resources mobilised for building homes and for the education and health services have given decreasing returns. The real problem is the

quality of the services provided; and no solution can be found without considering the question of the administering agency.

Bureaucratic inefficiency

11. The agency responsible for dealing with constantly rising collective needs which cannot be properly satisfied through the normal market processes, is, of course, the State.

The result has been a vast expansion of the administrative machine and a more important role for the administering bureaucracy.

The bureaucratic form of organisation, which Weber recommended as ideal for rational action, is now more or less discredited. There are complaints on all sides that bureaucracy is "inefficient" in meeting the demand for public services. Administrative reforms are demanded to speed up, decentralise, and "streamline" procedures, and so on.

But the problem of bureaucratic administration seems to go deeper; in addition to the charge of inefficiency, critical consideration must be given to the bureaucracy's ability to meet the needs of a modern industrial society and to its position in the pattern of power.

Government services are still reasonably efficient in their own traditional sphere of administration. It is precisely this type of administrative activity which does not fit in with the needs of a modern, go-ahead and varied industrial society.

By administrative action I mean action taken within limits from which all doubt is excluded by the strict application of rules and the rigid demarcation of duties in discharge of an objectively-determined function and in conditions not subject to sudden change.

The hall-marks of a modern industrial society are constantly-changing conditions and an atmosphere of uncertainty.

This is true of "private" needs which are expressed through the market; it is also increasingly true of collective economic and social needs. These needs cannot be fixed as norms but must be treated as magnitudes which vary with the community's requirements.

Because of its authoritarian and hierarchical nature, the administrative machine crystallises its objectives into rules of conduct, which it follows and applies uniformly, regardless of the way the public reacts. The civil service has functions, not objectives, rules rather than alternatives and rigid procedures rather than options.

Administration on the Weberian pattern is perfectly rational in a relatively static and "certain" situation but becomes irrational in uncertain and rapidly-changing circumstances, when the problem is to identify objectives after first studying what is needed and feasible, to provide the necessary means and to modify both objectives and means continuously according to the reactions aroused.

It is not, therefore, a matter of restraining the excesses and curbing the unhealthy features of bureaucracy but of questioning the bureaucratic organisation of the social services as such.

The bureaucratic structure which is strictly functional within its sphere (with clearly specified powers) and formal in its administration (with standard, uniform rules) cannot, without disowning itself, be transformed into machinery for dealing with objectives.

Quite understandably therefore, it resists any attempt not so much at decentralisation which, within limits, is quite compatible with a functional pattern, but rather at planning, in the sense of action directed to the achievement of specific objectives.

There is also the well-known tendency of the bureaucracy to become a closed corporation, to "eliminate the end-purpose" of its action,[9] which is to serve the public and to become an end in itself, thus widening further the gulf between the administration and the public;[10] it is thus ceasing to be the 'responsible and responsive" structure it has been said to be (Robson).[11]

12. In modern society, therefore, bureaucracy is not irrational because it is inefficient but because of what it actually is.

In the case of public services, the problem is not so much the amount of money the State can provide for the purpose but the illogical way that money is administered; there is no link with the political demand which can only be determined by completely rational, democratic planning, but administrative rules which have become wholly arbitrary with the passage of time are applied.

These rules are of course regularly adjusted by what has been called "parallel bureaucratic administration" by which is meant, using the considerable discretionary powers available to the civil service to meet the demands of economic pressure groups and political clients (Giovanni Giolitti said that rules are interpreted for friends and applied to enemies).

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[9] C M.M Joad *Decadence, a philosophical enquiry*, London, 1948.

[10] R.K.Merton: *The unanticipated consequences of purposive social action.* Am Soc Rev 1936 pp 894-904 and *Bureaucratic structure and personality*, Social Forces XVIII (1940)

A. Gouldner *Patterns of Industrial Bureaucracy*, Glencoe, 1954

While this may be a "malfunction" from the Weberian point of view, it is still no remedy for the illogical character of administrative action.

The bureaucracy therefore has no subjective responsibility and there may be no need to reform it as such. Armoured cavalry in close formation was a wonderful invention. At Agincourt it fought bravely as always. The blame for its defeat lay not with itself but with the English archers, against whom the cavalry was impotent. We must ask ourselves, therefore, whether the ineffectiveness of administrative action in the specific case of the demand for economic and social collective services does not stem from the nature of the State itself; and whether the State should not get down from its horse and learn to live in a different way.

The two linked problems which emerge are the *rationalisation of decisions* and greater democracy in administration.

Rationalisation of decisions

13. Things which are completely reasonable in the earthly paradise of bureaucracy become unreasonable in our restless purgatory. It is now universally recognised that resources for collective needs are irrationally administered. The vast sums entrusted to the State are applied according to established patterns and the relative strengths of the various branches of the administration, in dealing with each other and with other pressure groups. They are allocated in accordance with ancient rules which are both inflexible and arbitrary.

The traditional method of drawing up the State budget is common knowledge. It involves a process of decision which one student of public finances has called "muddling through".[12] The spending authorities come to the political market and strike a bargain; as in every oligopolistic market, there is no point in trying to change everybody's share by starting a fight if the relative strengths engaged are not substantially changed. The result is a kind of order which is highly instructive to observe without enquiring into its basis in logic.

This method has been extrapolated from the State budget to the national economic budget when various needs have driven some governments to adopt national economic planning.

National economic planning springs from the need to maintain a short-term balance between supply and demand or to ensure faster general economic development or more balanced development between regions and sectors. As the more general economic objectives and the planners' "aggregates" are broken down into more specific objectives, they reveal the inadequacy of the available

12 C.L. Schultz, *The politics and economics of public spending*, Washington 1968.

instruments for analysis and the strong dislike of the administrative machine for any attempt to define objectives.

There is thus a danger of economic planning becoming the victim of a conspiracy between the civil service and the keepers of the nation's accounts.

The nation's accounts in fact fit perfectly into the favourite image of a cake to be divided; a bit for you and a bit for you, but be careful not to take more than there is.[13] The basic problem is presented as one of dividing a finite quantity wisely between a number of uses In other words, as a typical traditional "budget" problem.

This leads to a number of mysterious rules. For example, the rule that defence takes 6% of the national income. Why 6%? This seems to have been laid down in some international agreement Then 1.1% for aid to developing countries, for the same reason, 5% for health services; "that's what they do in other countries" and so on Within these compartments, however, the usual methods of oligopolistic bargaining between ministries, departments and offices apply.

As a result, there is a danger that irrationality may be planned and approved by law.

14. *Planning is at present passing through a period of criticism and self-criticism.* The realisation that decision-making processes are open, continuous and many-centred has revealed the inadequacy of the theoretical pattern of national accounting on which planning is based and, in particular, its inadequacy as an instrument for reaching operational decisions (and not simply a table for checking the overall compatibility of decisions which are discounted to some extent).

At the same time, realisation of the arbitrary nature of decisions concerning the use of Government funds has encouraged efforts to find new methods of "rational planning" based on the application of systems analysis.

At the moment, the old methods of "planning expenditure" are found side by side with the new methods, which are still in the experimental stage; and this co-existence is likely to continue because of the different approaches and scope of the two techniques.[14] However, unless the decision-making process is rationalised by the progressive introduction of "objective planning" or "project planning" methods, expenditure on collective needs is liable to increase out of all proportion, with a colossal amount of waste[15] without any corresponding

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[13] See Dow, quoted by F. Caffè, *Politica economica.*

[14] Such co-existence is made possible by applying rational planning–the microplanning of separate projects–to the instrumental variables of the plan only (decisions) and by applying macroplanning to aggregates in the general compatibility table

[15] *As already noted, social expenditure rises* faster than total income. Some types of expenditure are highly elastic

increase in human well-being; on the contrary, the present confusion and hardship will become worse.

"Unless we are to risk an uncontrolled explosion of expenditure, it is inconceivable that activities such as education, which sometimes absorb over one twentieth of the nation's resources should be administered by a system and rules which in some cases are over one hundred years old. Again, unless we accept the possibility of sacrificing arbitrarily some of the hopes and essential needs of modern communities, it is illusory to try to arrest the progress of social departments by imposing ceilings arrived at by intuition".[16]

Project planning involves a systematic and continuous study of the condition, needs and aspirations of society, in order to define the aims of social action within an overall plan; it involves identifying and costing the various alternatives and then deciding between them.

This does not assume the existence of a set scale of social priorities or of objectively-determined needs which must be met; it means working out a scale of priorities and a social plan, on the basis of systematic research and exploration. It is a rational method of seeking the views of the public (reducing, as far as possible, the weight of emotive factors or of downright inertia). It is a method of arousing social demand, by analysing the confused aspirations which at present find no backing or expression either in the political system or in the bureaucratic machine.

Galbraith's "social balance" can only be restored by a rationally-expressed social demand, which will give precise direction and first priority to resources for the satisfaction of collective needs; more democracy in decision-making.

15. Project-planning is therefore much more than a technical problem. The choice of a system of social indicators and the introduction of systems analysis techniques do not mean simply the replacement of the old bureaucratic machine by teams of experts and technicians; more democracy must be injected into the decision-making process.

Failure to understand that the problem of rationalising decisions concerning public expenditure is essentially political, is perhaps the main cause of the slow progress which the new techniques are making, after the first flush of enthusiasm, in the very countries which were the first to adopt them.

The identification of social policy targets involves recruiting the services of experts and technicians, but the problem cannot be solved by experts and technicians on behalf of society. In his book *Lo choc del futuro* (The impact

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15 J.M. Collette, *Etude sur les systèmes de décision*, Institut de recherche des Nations Unies pour le développement social, Geneva 1970.

of the future), Alvin Toffler recapitulates the numerous attempts made in America to define in systematic terms the problem of setting social targets and taking reasoned decisions: they include the study "Aims for Americans" commissioned by President Eisenhower in 1960, the great PPBS experiment launched by Johnson and, pastly, Nixon's very recent solemn declarations: "The time has come for us to dedicate ourselves, consciously and systematically, to the problem of what kind of nation we want to be ... I have to-day ordered, here in the White House, the setting up of a group to study national aims ..." "The problem is always Who is to determine these aims?"[17] From whom does he derive his authority? How is he to win the consent of the people who will have to put those aims into effect?

The idea that the choice should be entrusted to "qualified" experts stems from the belief that the problems of modern society have become too complicated to be dealt with by democratic methods. In reality, this belief is as old as the hills. Society has always been too immature and its government's problems have always been too complicated for those who start from the belief that ordinary men and women have neither the capacity nor the right to decide their own destiny.

These long-held élitist ideas, which have been refurbished with a coat of technocratic paint, are in reality becoming more and more out of date in our changing industrial society. In this kind of society, with its complexity, variety and constantly-changing structure, there is a very high degree of social interaction, calling for a flow of information to all points of the compass. Every "directive" is an outgoing item of information which requires a reply, and so on. The claim that this flow should be channelled in the single traditional direction "from the top downwards" blocks any feedback and gives the élite a distorted image of a society moving in directions unknown to it.

The technocratic élite thus finds itself having to cope with a society which is incomprehensible, improbable and unforeseeable. *Even with all their sociologists* and their costly sophisticated forecasting instruments, they are still bewildered by the surprises which a silent society conceals in the depths of its being.

The complexity of modern industrial society is certainly not reflected in the institutions of parliamentary democracy which have come down to us almost unchanged from the 19th century. But the whole problem is to change these political institutions. For a society which is more affluent, better educated and potentially freer than its predecessors, the change must be in the direction of wider and more radical democracy.

The existing institutions of democracy are criticized for the sake of a more

[17] A. Toffler, op. cit pp 468–469.

modern and articulate democracy, which must plan rather than be planned, and not for the sake of authoritarian solutions, inspired by the barracks or the factory, which reveal, even more than their conservatism, the sterile imaginations of the everlasting inventors of "police-whistle" republics.

16. Modern society is making ever-increasing demands for planning and self-government. "In a super-industrialised society, democracy is not a political luxury but an absolute necessity."[18]

It is of course utopian to dream of attaining a perfectly rational and democratic model society. But it is not in the least utopian to try and find solutions as close to that model as possible.

Self-government can be pursued as an ideal through a practical search for more and more advanced forms of participation. The aim is in no way to achieve the impossible pattern of a completely anarchic society, but to answer the demand for participation whenever circumstances so permit.

Not all branches of society are equally amenable to the "socialisation of power". Businesses are among the least amenable because of their rigid technological determinism. The same applies to the main security services—the police, defence forces and to a lesser extent justice—for which the administrative machine is essential because they are indivisible, and strictly objective, and have powers of compulsion.

On the other hand, there are intermediate areas, where the degree of freedom of expression, variety and independence enjoyed by society at large is less than it might be.

In the ever-widening field of collective needs—welfare, education, health, culture and leisure—there is vast scope for varied forms of participation in control.

In these cases, administration can be rationalised and objectives planned only through greater democracy, with less state control and less bureaucracy.

The individual social services are not divisible but they can be made available in optimum "amounts" to social groups, whose size should be determined by reference to "satisfactory" standards of efficiency and participation. In other words, manageable, planned systems must be created. The existing main headings under which collective services like education, health, etc. are classified, have become unmanageable for any decision-making process based on planned objectives and for the attainment of the degree of participation needed to ensure that the service provided is efficient.

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[18] A. Toffler, op. cit, page 471.

Intermediate groupings (communities) must be established between the State and the citizen to expand the demand for social services and take over their administration.

17. On a territorial basis, an obvious intermediate level is the region or city The present trend towards the reconstitution of regional political authorities in Europe clearly demonstrates the intractability of the problem of territorial structures, the environment and urban growth in these days of centralisation and political apathy among the communities directly concerned with the use of the territory.

But modern means of communication are so swift, and in some cases immediate, that communities not linked with territorial divisions can be formed by voluntary association, on the basis of plans aimed at common objectives; these might be called "planning communities". Going further, plans can be limited to a single aspect of social life—permanent educational centres, health schemes, tourist routes, and so on—or to a number of related aspects, leading finally to complex, well-articulated communities; these would be "planning universities" and new "cities" (*polis*) round which the fabric of social relations, now threatened with disruption, could be reformed. In contrast with "technostructures" characterised by the mobilisation of mankind in the service of production, they might be called "polistructures".

18. The decentralisation of social services to such communities would naturally require new institutions capable of maintaining a fair balance between the central government, the community and the citizen.

Relations between central governments and communities would have to be in some contractual form (possibly similar to a concession) defining the communities' sphere of independence and retaining overall planning and supervisory powers for the central government. Agreements of this kind would have to be sufficiently flexible to adapt to changing circumstances The central governments would thus become planning and control centres for public economic and social services. Rather than by rigid rules their relations with the communities would be governed more by the "variable constitution" of the National Plan, which would embody and consolidate all the plans worked out at the different levels.

The communities would, naturally, enjoy a considerable measure of autonomy in the matter of finance. The principle of a single budget, like that of a uniform structure, is no longer compatible with the conditions of modern society. It should be retained for the indivisible sectors of the public services—such as the security services—which need a uniform, centralised administration. The economic and social services could be financed partly from the central plan, through an equalisation fund, to ensure a minimum service for every citizen, and partly by direct contributions from the members of the particular community.

19. Each community would also enjoy wide autonomy as regards its own internal organisation and would set up institutions which would have to be recognised by the central government. The "incorporation" of the community would guarantee its members' rights and a democratic form of organisation.

The participation of members in the government of the community would be ensured by the direct link established between the services provided and the source of the necessary funds; it would be given concrete expression through the community's representative bodies.

Within such representative bodies the principle of "no taxation without representation" would regain its original, historical meaning.

Furthermore, in a community responsible for putting a plan into effect, the relationship between governors and governed would no longer be one of uncontested authority but one of two-sided discussion, with the administrators acting increasingly as experts in the service of the community, vested with powers closely linked with their duties under the plan.

The most forceful example is in the teacher-pupil relationship. It is quite ridiculous to call for its replacement by an impossible self-taught community, as demanded by the wildest and noisiest of protesters. It is equally anachronistic that schools should continue to be a kind of cultural barracks where well-drilled regiments of disciplined pupils are taught uniform ideas, mental habits and forms of behaviour. A proper balance can be achieved in a community of teachers and pupils, on the basis of critical collaboration, this relationship accepts the master's authority based on knowledge and uses it to the benefit of his critical students; on this basis, many decisions concerning the life of the community are taken jointly.

In these circumstances, the "government" of the community becomes the opposite of a bureaucratic administration; it is a light and flexible structure which is modified continuously by the community "plan"; it is linked with the aims of the plan and sanctioned by the consent of the members of the community.

The principle of free association with the community naturally means that its members can join and withdraw at will. This also opens the way to competition and emulation in seeking effective and efficient methods of management; where the administration has a complete monopoly there can be no such competition.

20. It may well be argued that machinery of this kind would require a different breed of men from those whom nature has evolved by a lengthy process of selection. Here again, however, the pessimism of conventional wisdom should be put to the test. Only rural communities living in the past can allow

themselves the luxury of living by proverbs. Industrial communities are constantly having to solve new problems.

One such problem is that at a certain stage in the satisfaction of individual needs, the selfish acquisitive *instinct ceases to be a powerful incentive* to action. It is supplemented and replaced by other equally selfish, but more sophisticated motives. Among these, pride in good work, professional esteem, pleasure in having one's ideas shared and determination to carry through a joint enterprise are all gaining in strength and importance. Mandeville's provocative juxtaposition of private vice and public virtue, which so scandalised the detractors of the "dismal science", is now losing its significance.

It would seem rather that the new, younger generations of society are showing certain healthy disaffection for all forms of encouragement to individual competition; such rivalry no longer finds its expression in the harsh and bracing climate of industrial production, in the good old days of the Victorian entrepreneur, but in the harassing and invigorating atmosphere of consumer competition when the motto is "to keep up with the Jones".

Willingness to take part in joint, creative activities and to work towards a common goal is not just a philosophical hypothesis. It is a need which is already finding expression, as yet in distorted and largely unconscious forms,[19] but still in forms which are clear to everyone but lovers of old proverbs.

The European Economic Community: chances and risks

21. *The European Economic Community*: opportunities and dangers· a few words in conclusion.

The last twenty years have shown us that economic growth does not automatically lead to greater happiness. Social needs and aspirations which cannot easily be financially quantified must be satisfied in order to ensure that economic progress does not ultimately lead to social ills. But these needs and aspirations call for more than the mobilisation of increased resources. They also call for a plan of action which will give a definite direction and precise meaning to social measures. Furthermore, neither "objective" nor "project" plans can be implemented by the old bureaucratic administrations or by teams of technocrats. Such planning must be based on constant, direct participation by the general public. This will involve the redistribution and "socialisation" of power, the progressive dismantling of the bureaucratic structure and the direct transfer to communities of citizens, formed for particular projects, of responsibility for determining the "demand" for social services and for their management.

22. Potentially at least, the creation of the European Economic Community offers a great opportunity for reducing the role of the State and for directing

[19] See E Fromm, *Psicanalisi della vita moderna*, Community.

the economic development of the members of the Community towards a genuine improvement in the "quality of life".

In other words, the EEC could be a European "Grand Design" to which its structures should be geared.

Unfortunately, it must be admitted that things have turned out differently so far.

The kind of development towards which the EEC seems to be directed has an economic rather than a community bias. Much more than the quality of life, economic and technological development would so far appear to have been its driving force.

From the political angle, the Community's institutions seem to be moving towards the pattern of a super state, seeking for itself powers at present exercised by the national States.

These trends have accentuated the two negative features which have gone hand in hand with the otherwise enormous expansion of Europe's economy over the last two decades; these are, first, technological and productive growth without any social purpose to provide the necessary justification, direction and standard of appraisal; and secondly, a greater measure of bureaucracy in those fields of human activity—the social services, education and cultural activities—which should constitute the freest and most direct expression of a society rich in resources and energies.

The worst possible result of this process would be the combination of Japanese-style technocratic laissez-faire with a Russian-style bureaucracy. A "mixed" society born of the union of these two partners would decidedly be a monstrosity.

The Europe of to-morrow can be a strong and remote "Administration", bereft of purpose and obsessed with standardization and harmonisation, with the unification of means it does not know how to use and with the accumulation of abstract power to do goodness knows exactly what; or it can be a "Grand Design" capable of bringing together and unifying national and regional communities, which will keep their individuality and will seek to attain their goals in different ways; which will have strong political structures and light administrative machinery; which will put politics before economics and culture before politics.

APPENDIX

Data relating to social expenditure in certain countries of the Western World during the period 1959/69.

Notes:

(a) Absolute figures are expressed in the currency of the country.
(b) Social investments are obtained by adding together public and housing investment
(c) *Public consumption is shown for the Forces and for Civilians The information is available only in this form* for purposes of international comparisons
(d) Social costs are obtained by adding social investments to public consumption
(e) Social expenditure is obtained by adding together social costs and current transfers from the Public Administration consolidated account
(f) Changes between the various items of social expenditure and national income are calculated for the periods concerned by relating the rate of variation of the items to the rate of variations of national income at market prices
(g) All information is given at current prices.
(h) Countries are listed in decreasing order of importance of the national income portion earmarked for social expenditure for 1969.

TABLE 1

Development in the share of national income earmarked for social expenditure during the period 1959/69 in certain countries of the western world

	Social investments National income			*Social costs* National income			*Social expenditure* National income		
Countries	1959	1964	1969	1959	1964	1969	1959	1964	1969
Netherlands	7.8	8.5	9.4	21.3	24.1	25.1	31.5	36.8	42.6
Sweden	5.9	6.8	7.0	23.4	25.1	29.0[1]	31.4	34.4	41.1
France	7.6	9.6	10.2	21.0	22.4	22.5	34.0	38.0	39.3
German F.R.	8.3[2]	11.0	9.0	21.9[2]	25.7	24.5	34.3[2]	38.2	37.7
Italy	7.6	9.0	8.9	19.7	22.5	22.4	30.6	34.0	37.6
Belgium	6.5	9.3	8.4	19.2	22.1	22.6	30.4	33.0	36.3
Norway	4.4	4.1	4.9[1]	18.6	19.6	23.1[1]	27.0	28.6	35.0[1]
USA	8.3	7.4	6.3	26.3	25.9	27.3	31.3	31.1	33.6
UK	3.5	4.8	5.6	20.3	21.8	23.7	26.8	28.6	32.4
Denmark	3.5	4.4	4.2[1]	16.3	19.2	19.8	23.7	26.8	29.3[1]
Japan	9.0	10.7	10.0[1]	18.3	19.5	18.2	22.3	23.5	21.9[1]

[1] Figures for 1968
[2] Figures for 1960
Source: National Accounts of OECD countries

TABLE 2

Ratio of expenditure earmarked for social purposes related to national income during the period 1959/69 in certain countries of the western world

	Social investments National income			*Social costs* National income			*Social expenditure* National income		
Countries	1959/64	1964/69	1959/69	1959/64	1964/69	1959/69	1959/64	1964/69	1959/69
Netherlands	1.2	1.2	1.2	1.3	1.1	1.2	1.3	1.3	1.3
Sweden[1]	1.3	1.1	1.2	1.2	1.5	1.3	1.2	1.6	1.4
France	1.5	1.1	1.3	1.1	1.0	1.1	1.2	1.1	1.2
German R.F.[2]	1.9	0.4	1.1	1.5	0.9	1.2	1.3	1.0	1.2
Italy	1.3	1.0	1.2	1.3	1.0	1.1	1.2	1.3	1.2
Belgium	2.0	0.7	1.4	1.4	1.1	1.2	1.2	1.3	1.2
Norway	0.9	1.5	1.2	1.1	1.4	1.3	1.2	1.5	1.3
USA	0.6	0.6	0.6	0.9	1.1	1.1	1.0	1.2	1.1
UK	2.1	1.5	1.8	1.2	1.3	1.2	1.2	1.4	1.3
Denmark	1.5	0.9	1.2	1.4	1.1	1.2	1.3	1.2	1.2
Japan	1.2	0.9	1.1	1.1	0.9	1.0	1.1	0.9	1.0

[1] Results of the periods 1959-64, 1964: 68, 1959-68
[2] Results of the periods 1960-64, 1964, 69, 1960;69
Source: National Accounts of OECD countries

TABLE 3.1

Development in social expenditure from 1959 to 1969 in the Netherlands

	Million Florins at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1969	59–65	64–69	59–69	59–64	64–69	64–69	1959	1964	1969
Public investments	1 140	2 330	4 060	15.4	11.8	13.6	1.5	1.1	1.3	3.01	3.79	3.99
Housing	1 820	2 897	5 510	9.8	13.7	11.7	1.0	1.3	1.1	4.81	4.71	5.41
Social investments	**2 960**	**5 227**	**9 570**	**12.0**	**12.9**	**12.5**	**1.2**	**1.2**	**1.2**	**7.82**	**8.50**	**9.40**
Public consumption	5 086	9 560	16 020	13.4	10.9	12.2	1.3	1.0	1.2	13.44	15.56	15.72
(Military)	(1 397)	(2 573)	(3 300)	(13.0)	(5.1)	(9.0)	(1.3)	(0.5)	(0.9)	(3.69)	(4.19)	(3.24)
(Civilian)	(3 689)	(6 987)	(12 720)	(13.6)	(12.8)	(13.2)	(1.3)	(1.2)	(1.3)	(9.75)	(11.37)	(12.48)
Social costs	**8 046**	**14 787**	**25 590**	**12.9**	**11.6**	**12.3**	**1.3**	**1.1**	**1.2**	**21.26**	**21.06**	**25.12**
Transfers	3 889	7 863	17 820	15.1	17.4	16.5	1.5	1.6	1.6	10.28	12.79	17.49
Social expenditure	**11 935**	**22 650**	**43 410**	**13.7**	**13.9**	**13.8**	**1.3**	**1.3**	**1.3**	**31.54**	**36.85**	**42.61**
Gross national expenditure at market prices	**37 829**	**61 463**	**101 880**	**10.2**	**10.6**	**10.11**						

Source: National Accounts of OECD Countries

TABLE 3.2

Development in social expenditure from 1959 to 1969 in Sweden

	Million krones at current prices			Average annuel tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1968	59–64	64–68	59–68	59–64	61–68	59–68	1959	1964	1969
Public investments	287	669	1 091	18.5	13.0	16.0	1.99	1.57	1.57	0.46	0.69	0.83
Housing	3 389	5 893	8 188	11.7	8.6	10.3	1.26	1.04	1.17	5.48	6.12	6.19
Social investments	**3 676**	**6 562**	**9 279**	**12.3**	**9.1**	**10.8**	**1.32**	**1.10**	**1.23**	**5.94**	**6.81**	**7.02**
Public consumption	10 827	17 572	29 002	10.1	13.4	11.5	1.09	1.61	1 31	17.50	18.24	21.94
(Military)	(2 822)	(4 064)	(5 215)	(7.6)	(6.4)	(7.1)	(0.82)	(0.77)	(0 81)	(4.56)	(4.22)	(3.95)
(Civilian)	(8 005)	(13 508)	(23 787)	(11.0)	(15.2)	(12.8)	(1.18)	(1.83)	(1.45)	(12.94)	(14.02)	(17.99)
Social costs	**14 503**	**24 134**	**38 281**	**10.7**	**12.2**	**11.4**	**1.15**	**1.47**	**1.30**	**23.44**	**25.05**	**28.96**
Transfers	4 953	9 038	16 109	12.8	15.6	14.0	1.38	1.88	1.59	8.00	9.38	12.19
Social expenditure	**19 456**	**33 172**	**54 390**	**11.3**	**13.1**	**12.1**	**1.22**	**1.58**	**1.38**	**31.44**	**34.44**	**41.14**
Gross national expenditure at market prices	**61 879**	**96 328**	**132 195**	**9.3**	**8.3**	**8.8**	—	—	—			

Source: National Accounts of OECD Countries

TABLE 3.3

Development in social expenditure from 1959 to 1969 in France

	Million francs at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1969	59–64	64–69	59–64	59–64	64–69	59–69	1959	1964	1969
Public investments	6.05	14.33	23.60	18.8	10.5	14.6	1.74	1.08	1.42	2.22	3.14	3.25
Housing	14.55	29.31	50.36	15.0	11.4	13.2	1.39	1.18	1.28	5.34	6.43	6.95
Social investments	**20.60**	**43.64**	**73.96**	**16.2**	**11.1**	**13.6**	**1.50**	**1.14**	**1.32**	**7.56**	**9.57**	**10.20**
Public consumption	36.71	58.33	89.12	9.7	8.8	9.3	0.89	0.91	0.90	13.47	12.79	12.29
(Military)	(15.97)	(19.14)	(25.43)	(3.7)	(5.9)	(4.8)	(0.34)	(0.61)	(0.47)	(5.86)	(4.20)	(3.51)
(Civilian)	(20.74)	(39.19)	(63.69)	(13.6)	(10.2)	(11.9)	(11.26)	(1.05)	(1.16)	(7.61)	(8.59)	(8.78)
Social costs	**57.31**	**101.97**	**163.08**	**12.2**	**9.9**	**11.0**	**11.13**	**1.02**	**1.07**	**21.03**	**22.36**	**22.19**
Transfers	35.35	71.49	121.74	15.1	11.2	13.2	11.40	1.15	1.28	12.97	15.68	16.79
Sociale expenditure	**92.66**	**173.16**	**284.82**	**13.4**	**10.4**	**11.9**	**1.24**	**1.07**	**1.16**	**34.00**	**38.04**	**39.28**
Gross national expenditure at at market prices	**272.56**	**455.99**	**725.00**	**10.8**	**9.7**	**10.3**	—	—	—			

Source: National Accounts of OECD Countries

TABLE 3.4

Development in social expenditure from 1959 to 1969 in the German FR

	Million D. Marks at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1960	1964	1969	60–64	64–69	60–69	60–64	64–69	60–69	1960	1964	1969
Public investments	7,96	19,51	23,21	25,1	3,5	2,6	2,9	0,5	1,6	2,63	4,62	3,86
Housing	17,09	26,81	30,77	12,0	2,8	6,8	1,4	0,4	0,9	5,65	6,36	5,12
Social investments	**25,05**	**46,35**	**53,98**	**16,7**	**3,1**	**8,9**	**1,9**	**0,4**	**1,1**	**8,28**	**10,98**	**8,98**
Public consumption	41,12	62,24	93,17	10,9	8,4	9,5	1,3	1,2	1,2	13,59	14,74	15,49
(*Military*)	(9,64)	(15,87)	(19,05)	(13,3)	(3,8)	(7,9)	(1,5)	(0 5)	(1,0)	(3,19)	(3,76)	(3,17)
(Civilian)	(31,48)	(46,37)	(74,12)	(10,2)	(9,8)	(10,0)	(1,2)	(1,3)	(1,3)	(10,40)	(10,98)	(12,32)
Social costs	**66,17**	**108,59**	**147,15**	**13,2**	**6,3**	**9,3**	**1,5**	**0,9**	**1,2**	**21,87**	**25,72**	**24,47**
Transfers	37,61	52,86	79,64	8,9	8,5	8,7	1,0	1,2	1,1	12,43	12,52	13,24
Social expenditure	**103,78**	**161,45**	**226,79**	**11,7**	**7,0**	**9,1**	**1,3**	**1,0**	**1,2**	**34,30**	**38,24**	**37,71**
Gross national expenditure at market prices	**302,55**	**122,14**	**601,40**	**8,7**	**7,3**	**7,9**						

Source: National Accounts of OECD Countries

TABLE 3.5

Development in social expenditure from 1959 to 1969 in Italy

	Million Lire at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1969	59–64	64–69	59–69	59–64	64–69	59–69	1959	1964	1969
Public investments	319	612	847	11.9	6.7	9.3	1.7	0.8	0.9	1.74	1.80	1.66
Housing	1 172	2 453	3 713	15.9	8.6	12.2	1.4	1.0	1.2	5.85	7.21	7.27
Social investments	**1 521**	**3 065**	**4 560**	**15.0**	**8.3**	**11.6**	**1.3**	**1.0**	**1.2**	**7.59**	**9.01**	**8.93**
Public consumption	2 416	4 594	6 876	13.7	8.4	11.0	1.2	1.0	1.1	12.06	13.50	13.46
(Military)	(502)	(811)	(1 902)	(10.1)	(18.6)	(14.2)	(0.9)	(2.2)	(1.4)	(2.50)	(2.38)	(3.72)
(Civilian)	(1 914)	(3 783)	(4 974)	(14.6)	(5.6)	(10.0)	(1.3)	(0.7)	(1.0)	(9.56)	(11.12)	(9.74)
Social costs	**3 937**	**7 659**	**11 436**	**14.2**	**8.4**	**11.2**	**1.3**	**1.0**	**1.1**	**19.65**	**22.51**	**22.39**
Transfers	2 196	3 912	7 777	12.3	14.7	13.6	1.1	1.7	1.4	10.96	11.50	15.23
Social expenditure	**6 133**	**11 571**	**19 213**	**13.5**	**10.7**	**12.1**	**1.2**	**1.3**	**1.2**	**30.61**	**34.01**	**37.62**
Gross national expenditure at market prices	**20 029**	**34 027**	**51 066**	**11.2**	**8.5**	**9.8**	—	—	—			

Source: Nationa\ Accounts of OECD Countries

TABLE 3.6

Development in social expenditure from 1959 to 1969 in Belgium

	Million frances at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market price		
	1959	1964	1969	59-64	64-69	59-69	59-64	64-69	59-69	1959	1964	1969
Public investments	9.8	19.5	33.3	14.7	11.3	13.0	1.9	1.4	1.6	1.85	2.52	2.93
Housing	24.5	52.2	61.8	16.3	3.4	9.7	2.1	0.4	1.2	4.61	6.75	5.44
Social investments	34.3	71.7	95.1	15.9	5.8	10.7	2.0	0.7	1.4	6.46	9.27	8.37
Public consumption	67.5	98.9	161.6	8.0	10.3	9.1	1.0	1.3	1.2	12.71	12.79	14.22
(Military)	(17.6)	(23.6)	(31.6)	(6.1)	(6.0)	(6.0)	(0.8)	(0.8)	(0.8)	(3.31)	(3.05)	(2.78)
(Civilian)	(49.9)	(15.3)	(130.0)	(8.6)	(11.5)	(10.1)	(1.1)	(1.4)	(1.3)	(9.40)	(9.74)	(11.44)
Social costs	101.8	170.6	256.7	10.9	8.5	9.7	1.4	1.1	1.2	19.17	22.06	22.59
Transfers	59.5	84.2	155.4	7.2	13.0	10.1	0.9	1.6	1.3	11.20	10.89	13.67
Social expenditure	161.3	254.8	412.1	9.5	10.1	9.8	1.2	1.3	1.2	30.37	32.95	36.26
Gross national expenditure at market prices	531.1	773.4	1136.4	7.8	8.0	7.9	—	—	—			

Source: National Accounts of OECD Countries

TABLE 3.7

Development in social expenditure from 1959 to 1969 in Norway

	Million krones at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1968	59–64	64–68	59–68	59–64	64–68	59–68	1959	1964	1968
Public investments	26	81	112	25.5	8.4	17.6	3.0	0.8	1.8	0.08	0.18	0.16
Housing	1 314	1 816	3 354	6.7	16.6	11.0	0.8	1.5	1.1	4.28	3.95	4.77
Social investments	**1 340**	**1 897**	**3 466**	**7.2**	**16.3**	**11.2**	**0.9**	**1.3**	**1.2**	**4.36**	**4.13**	**4.93**
Public consumption	4 363	7 124	12 770	10.3	15.7	12.7	1.2	1.4	1.3	14.21	15.51	18.18
(Military)	(1 031)	(1 483)	(2 448)	(7.5)	(13.4)	(10.1)	(0.9)	(1.2)	(1.1)	(3.36)	(3.23)	(3.49)
(Civilian)	(3 332)	(5 641)	(10 322)	(11.1)	(16.3)	(13.4)	(1.3)	(1.5)	(1.4)	(10.85)	(12.28)	(14.69)
Social costs	**5 703**	**9 021**	**16 236**	**9.6**	**15.8**	**12.3**	**1.1**	**1.4**	**1.3**	**18.57**	**19.64**	**23.11**
Transfers	2 595	4 415	8 321	11.2	17.2	13.8	1.3	1.5	1.4	8.45	9.61	11.84
Social expenditure	**8 298**	**13 436**	**24 557**	**10.1**	**16.3**	**12.8**	**1.2**	**1.5**	**1.3**	**27.03**	**28.60**	**34.95**
Gross national expenditure at market prices	**30 701**	**45 929**	**70 256**	**8.4**	**11.2**	**9.6**	**7.5**					

Source: National Accounts of OECD Countries

TABLE 3.8

Development in social expenditure from 1959 to 1969 in the USA

	Million dollars at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1969	59–64	64–69	59–69	59–64	64–69	59–69	1959	1964	1969
Public investements	113 570	18 670	25 760	6.6	6.7	6.7	1.2	0 8	1.0	2.77	2.92	2.73
Housing	26 800	28 280	38 680	1.1	3.5	2.3	0.2	0.4	0.3	5.48	4.43	3.57
Social investments	40 370	46 950	59 440	3.1	4.8	3.9	0.6	0.6	0.6	8.25	7.35	6.30
Public consumption	88 190	118 562	198 135	6.1	10.8	8.4	1.1	1.3	1.2	18.03	18.56	21.0
(Military)	(46 809)	(51 862)	(82 126)	(2.1)	(9.6)	(5.8)	(0.4)	(1.2)	(0.9)	(9.57)	(8.12)	(8.70)
(Civilian)	(41 381)	(66 700)	(116 009)	(10.0)	(11.7)	(10.9)	(1.8)	(1.4)	(1.6)	(8.46)	(10.44)	(12.30)
Social costs	128 560	165 512	257 575	5.2	9.2	7.2	0.9	1.1	1.1	26.28	25.91	27.30
Transfers	24 264	33 053	59 165	6.4	12.4	9.3	1.2	1.5	1.4	4.96	5.17	6.27
Social expenditure	152 864	198 565	316 740	5.4	9.8	7.6	1.0	1.2	1.1	31.26	31.08	33.57
Gross national expenditure at market prices	189 065	638 878	943 534	5.5	8.1	6.8						

Source: National Accounts of OECD Countries

TABLE 3.9

Development in social expenditure from 1959 to 1969 in the UK

	Million Pounds St. at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1969	59–64	64–69	59–69	59–64	64–69	59–69	1959	1964	1969
Public investments	175	378	669	16.7	12.1	14.4	2.6	1.8	2.2	0.73	1.15	1.48
Housing	661	1 211	1 839	12.9	8.7	10.8	2.0	1.3	1.6	2.75	3.68	4.07
Social investments	**836**	**1 589**	**2 508**	**13.7**	**9.6**	**11.6**	**2.1**	**1.5**	**1.8**	**3.48**	**4.83**	**5.55**
Public consumption	4 035	5 566	8 176	6.6	8.0	7.3	1.0	1.2	1.1	16.82	16.93	18.10
(Military)	(1 512)	(1 928)	(2 267)	(5.0)	(3.3)	(4.1)	(0.8)	(0.5)	(0.6)	(6.30)	(5.86)	(5.02)
(Civilian)	(2 523)	(3 638)	(5 909)	(7.6)	(10.2)	(8.9)	(1.2)	(1.5)	(1.3)	(10.52)	(11.07)	(13.08)
Social costs	**4 871**	**7 155**	**10 684**	**8.0**	**8.4**	**8.2**	**1.2**	**1.3**	**1.2**	**20.30**	**21.76**	**23.65**
Transfers	1 555	2 257	3 930	7.8	11.8	9.7	1.2	1.8	1.5	6.48	6.87	8.70
Social expenditure	**6 426**	**9 412**	**14 614**	**7.9**	**9.2**	**8.6**	**1.2**	**1.4**	**1.3**	**26.78**	**28.63**	**32.35**
Gross national expenditure at market prices	**23 993**	**32 873**	**45 174**	**6.5**	**6.6**	**6.6**						

Source: National Accounts of OECD Countries

TABLE 3.10

Development in social expenditure from 1959 to 1968 in Denmark

	Million krones at current prices			Average annual tax			Ratio related to income			Percentage in resepct of national incomeat market prices		
	1959	1964	1968	59–64	64–68	59–68	59–64	64–68	59–68	1959	1964	1968
Public investments	110	206	359	13.4	18.0	15.4	1.3	1.3	1.3	0.29	0.33	0.38
Housing	1 220	2 570	3 995	16.1	11.7	14.1	1.5	0.8	1.2	3.20	4.11	3.80
Social investments	1 330	2 776	4 394	15.9	12.2	14.2	1.5	0.9	1.2	3.49	4.44	4.18
Public consumption	4 877	9 215	16 456	13.6	15.6	14.5	1.3	1.1	1.2	12.81	14.74	11.64
(Military)	(955)	(1 790)	(2 372)	(13.4)	(7.3)	(10.6)	(1.3)	(0.5)	(0.9)	(2.51)	(2.86)	(2.26)
(Civilian)	(3 922)	(7 425)	(14 084)	(13.6)	(17.3)	(15.3)	(1.3)	(1.2)	(1.3)	(10.30)	(11.88)	(13.38)
Social costs	6 207	11 991	20 850	14.1	14.8	14.4	1.4	3.1	1.2	16.30	19.18	19.82
Transfers	2 826	4 762	10 009	11.0	20.5	15.1	1.1	1.5	1.3	7.40	7.62	9.51
Social expenditure	9 033	16 753	30 859	13.2	16.5	14.6	1.3	1.2	1.2	23.70	26.80	29.33
Gross national expenditure at market prices	38 085	62 529	105 205	10.4	13.9	12.0	—	—	—			

Source: National Accounts of OECD Countries

TABLE 3.11

Development in social expenditure from 1959 to 1969 in Japan

	Million yen at current prices			Average annual tax			Ratio related to income			Percentage in respect of national income at market prices		
	1959	1964	1968	59–64	64–68	59–68	59–64	64–68	59–68	1959	1964	1968
Public investments	601	1 495	2 592	20.0	14.7	17.6	1.16	0.74	0.95	4.62	5.16	4.32
Housing	575	1 608	3 439	22.5	21.0	22.0	1.30	1.05	1.19	4.42	5.55	5.72
Social investments	**1 176**	**3 103**	**6 013**	**21.5**	**18.1**	**19.9**	**1.24**	**0.91**	**1.08**	**9.04**	**10.71**	**10.04**
Public consumption	1 209	2 554	1 921	16.2	17.8	16.9	0.94	0.89	0.91	9.30	8.82	8.20
(Military)												
(Civilian)												
Social costs	**2 385**	**5 657**	**10 955**	**18.9**	**18.0**	**18.5**	**1.09**	**0.90**	**1.00**	**18.34**	**19.53**	**18.24**
Transfers	517	1 163	2 208	17.6	17.4	12.5	1.01	0.87	0.95	3.97	4.01	3.68
Social expenditure	**2 902**	**6 820**	**13 163**	**18.7**	**11.9**	**18.3**	**1.08**	**0.90**	**0.99**	**22.31**	**23.54**	**21.92**
Gross national expenditure at market prices	**12 993**	**28 936**	**60 070**	**17.3**	**20.0**	**18.5**	—	—	—			

Source: National Accounts of OECD Countries

IMPLICATIONS OF ENVIRONMENTAL MEASURES FOR INDUSTRIAL DEVELOPMENT AND THE SITING OF ENTERPRISES

by

G. PETRILLI

J. LAOT

H. JÜRGENSEN

COMMUNITY ECOLOGICAL POLICY: RESULTS OF THE ACTION FOR IMPROVING ENVIRONMENT ON INDUSTRIAL DEVELOPMENT AND SITING ENTERPRISES(*)

G. PETRILLI

I—DEFINING THE PROBLEM

1. There are good reasons to suspect that the industrial development of our continent tends to exceed—in many cases—the point of total maximum efficiency of the system thereby giving rise to contradictory phenomena showing a real challenge to the organizing, controlling and forecasting capacity by those who carry at present political, economic or cultural responsibilities

Form one aspect, the large concentrations of production—generally linked within the framework of the main urban centres of each country—are self-feeding according to cumulative movements, laying stress on the development potential of the strong areas compared with agricultural ones.

On the other hand, in these same areas of major concentration of mankind and production one notices, on an increasingly acute scale, phenomena of congestion and pollution representing in fact the "other side of the medal" of the large processes of technical developments of our continent.

Such problems assume a particular importance in those industrialized countries where the relative scarcity of resources tied to the ultimate aim to be achieved, is coupled to a marked rigidity of the national commercial balance. These countries are not in a position to oppose damage due to congestion and pollution with the fullness of means and the necessary machinery, and cannot look on in the face of continued destruction of national wealth due to the existence of such phenomena. It is, thus, necessary to review continuously the programmes of optimum distribution of their own resources in terms of increasing

(*) Translated from the Italian

heading towards disaster if they do not ration resources within the sphere of *the "economic philosophy of the spaceship"*[4] *that is*, if they do not set themselves strict limits *to the indiscriminate introduction* of noxious products in the earth's environment and if the natural resources available are not strictly rationed.

From this point of view the general discussion taking place on a World Scale since recent years about environment, its pollution and regarding the best ways of exploitation of its resources is all the more appropriate, at least in so far as one is anxious over a future which may see maritime basins or lakes (such as the Mediterranean or like the North Sea) transformed into ponds robbed of oxygenation, like Lake Erie, or to watch impotently the conversion of certain hydrographic basins (as the Rhine) as real sources of collective poisoning.[5]

3. It is worthwhile stressing that, from a purely economic point of view, the thinning of certain assets considered up to now as non economic because of their practically limitless availability, such as air and water, generates additional and potentially increasing costs to industrial complexes and, more generally, to the urbanization in the more developed regions, above all in relation to plants which become necessary to insure, in this and in other respects, the regeneration of the natural environment. Such additional costs are comparable to non ecological ones inherent to the development of new physical and social infrastructures in the zones where large flows of immigration occur due to a cumulative process of concentration of industrial investments. *In this connection it is worth noting that such investments cannot generally* be considered as replacing those which public services are bound to promote in the suburban areas through legislative obligations and connected with a more general re-distribution of national income; the very development of infrastructure in the most developed *regions becomes more costly due to general* conditions of ecological deterioration. The example can be quoted, in this regard, of the particular technical devices necessary in the development of road network for crossing water courses having a high level of pollution characterized by the presence of corrosive agents. The *fact that road infrastructures* are subject to abnormally high costs, even in peripheric regions, because of degradation of soil due to general worsening of ecological environment confirms, even under his aspect, the complementary nature which exists between the extreme situations determined in consequence of an economic development territorially imbalanced.

In the present state of affair one can see from these aspects a marked con-

[4] K. Boulding, *The Economics of the Coming Spaceship Earth*, J. Hopkins Press Baltimore 1966 (essays of a collection dealt with by H. Jarret *Environmental Quality*)

[5] These *and other examples* can be derived from the interviews given by J.Y. Cousteau, director of the Oceanographic Institute in the Principality of Monaco, to the *Corriere della Sera* (17/9/1970 and 3/12/1970), also from hearings in the Italian Chamber of Deputies in 1971, and above all the declarations made by Prof Marini Bettolo, p. 29 and following, Vol 1.

diseconomy even at the cost of postponing for an indefinite period the alternative interventions of re-equilibrium and of territorial or sectorial development.

2. The deterioration in environment consequent upon pollution acquires a particular and specific importance in this respect since the exploitation beyond measure of the resources defined by Murphy as "expendable" (i.e. coal, mineral oils and gas),[1] and the increasing contamination of reclaimable resources such as water, air and even living organisms, rapidly alter the biological outlook of life and compromises even their further economic development.

Against such a galloping ecological crisis, the physiological capacities of man's adaptability are much slower, therefore, should the present trends continue, the sharp mutations of environment will increasingly hinder the progress of strong areas because people will have to function under conditions of environment ever more difficult and liable, eventually, to compromise existence itself.

It may be expedient and reassuring to attribute this analysis, undoubtedly severe, to a certain current vogue of ecological pessimism. There exists, however, too much factual evidence on the current level of deterioration and gradual erosion of the ecologic system of earth and biosphere (especially in areas which are more advanced industrially) to doubt the probable future impossibility of the self regeneration of nature confronted by uncontrolled and increasing exploitation of resources and by pollution.

Besides, it is not without a reason that the topic of the risks and of the costs of this exploitation and progressive deterioration of wealth which, although "free" like water and air, should become today the dominant consideration in economic thought.

Till now, one has acted as if these resources were practically limitless, working on the basis of a behaviour clearly defined by Boulding as the "cowboy economy"[2] where the use of resources is reckless and lacks foresight. Moreover, it had been assumed that everyone was —and is—entitled to inject into the environment any type of products, including those causing pollution and even toxic ones,[3] as if individual responsibility ceases once the products or discharge of raw materials used in the production processed have left one's industrial plant or home.

Today, one begins to realize that the industrial systems of the west are rapidly

1 E.F. Murphy: *Governing Nature*, Quadrangle Books, Chicago 1967, p. 29
2 K. Boulding, *The Economics of the Coming Spaceship Earth*, J. Hopkins Press Baltimore 1966 (essays of a collection dealt with by H. Jarret *Environmental Quality*)
3 It should be mentioned that already Plato, in *De Republica* recommended a law concerning water according to which "... whoever corrupts water with poisonous substances shall be summoned for judgment and, if found guilty, he shall be condemned to purify the source or water deposits polluted."

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trast between the influence of cumulative factors which continue to increase from a business point of view, the suitability of location of new investments in the mostly developed regions (which determine a new city-country relationship opposing the suburban regions by way of depopulation to regions of immigration gradually transformed in immense conurbations) and the appearance at macro-economic level of additional and increasing costs which were dealt with previously. This fundamental contradiction shows itself through the social tensions arising in those immigration areas because of the gradual deterioration in the quality of life, expressed by a housing crisis and by the lack of social services and also by factors of disturbance of an ecological nature. The pressures sometimes exerted by local authorities on the enterprises concerned, invited to shoulder a part of the costs born by the community, in consequence of their decision to invest, could indicate in this connection the possible emergence of new factors which may influence the conditions of profitability of such investments causing a reversal of trend. Such a supposition appears all the more valid in that technological progress itself tends, no doubt, to increase the degrees of liberty granted to industries in their choice of location, once strictly dependent upon the availability of particular natural resources. In this connection the present economic decline of some amongst the major European coal bearing regions is significant; this decline is balanced elsewhere by an expansion built on the development of processing industries or basic industries supplied entirely with imported raw materials.

4. As concerns the ecological imbalance in its strictest sense (certainly not a new problem since equilibrium between man and his environment is as old as humanity itself but which today assumes a dramatic outline in the absence of biochemical or biophysical reactions spontaneously re-balancing) European industry appears today, under many aspects, as the main culprit both as a direct pollution factor of water, air and soil, and as a producer of goods having difficult or even non existant prospects of biodegradation and disposal.

There is certainly some truth in such an opinion on condition of not forgetting that industrial effluents alone contribute only partially to pollution of environment[6] and that, indeed, frequently the insertion of foreign elements in the natural environment to an extent that nature itself cannot bear, is a phenomenon attributable to a sum of individual egosisms or to blameworthy neglect on the part of large urban communities of the continent.

In effect, the "consumer society" almost never succeeds in consuming its products "in toto", resulting in an accumulation of large quantities of refuse on the fringes of our large cities, real graveyards of machines, domestic electrical appliances, plastic, wooden or paper wrappings and of anything else which is only "half consumed", to be later abandoned to environment at little or no cost.

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6 Hearings of the Italian Chamber quoted earlier, mention an incidence on a World basis of the order of about 30% – See the report of Ing. Badile of Finsider *Le acque* ... p 176, vol. 1.

The same can be said for water pollutions for which, apart from industry, there are other large polluters and especially the concentrated urban communities, refuse of large zootechnical and agricultural enterprises or certain extracting processes. In all these cases industry has several specific responsabilities which it is now time for it to *spot and to take bravely upon itself with* the guidance and help of public authorities. It is in this sense that, on the question of environment, community thinking is clearly oriented towards the objective of "... limiting (and if possible eliminating) the noxious effects of technical progress and, more generally, of the economic and social activities on the conditions of life, avoiding that the fight against pollution should become a fight against economic expansion and progress in general ...".[7]

Within certain limits, already today, new trends appear possible in scientific and technological research, capable of stimulating the current production structures and methodologies towards the necessary change of quality, i.e. capable *of reconciling the requirements of comfort to those of an ecological balance,* and it is in this sense that the present report proposes to suggest a first basis for discussion.

It seems equally necessary to see more clearly—and to show by documentary evidence—what foreseeable repercussions could ensue to industry from measures which are being scheduled to protect environment, bearing in mind that many forms of pollution are related to activities which are useful or even indispensable, *whilst there are few ecological problems* capable of being resolved by simple prohibition, because noxious waste—liquid, solid or gaseous—are frequently the inevitable by-products of necessary industrial processes.

In this sense, with a view to specifying constructively and realistically that which can be done, and when, the present report is presented in two distinct parts; the first, to define and discuss certain trends and criteria of intervention by the European Community concerning ecological policy; the second, to analyse possible industrial strategies deriving directly from such trends.

II—ECOLOGICAL POLICY OF THE COMMUNITY—A FEW PRINCIPLES AND CRITERIA OF INTERVENTION

1. In introducing the first topic one cannot hide the serious *situation which* arises in the World today due to persistent disagreements between different countries over ecological policy.

In the face of the indifference of certain countries on pollution problems which they give rise to and which they export and in the face of other countries

[7] see *First report of the Commission on the policy of the Community on environment* III/1050-3/71-1, chapter 1, para 1.

refusing to admit the common responsibility of all to oppose these dangerous situations, one has noticed recently unilateral legislative interventions on the part of other countries more seriously harmed by such indifference or refusal; these have seriously opened the discussions on the possibility of resolving, according to the rules of international rights, such a general and urgent problem.

It is objectively true that the efforts towards realizing a general agreement in such matter have had little success up to now; they bear witness, if nothing else, to the small number of national decrees to enforce the few international conventions which—at least for some types of pollution—have been convened with difficulty. It is in the face of this situation of profound disagreement and indifference (due to conflicting interests) that the moment has come for the European Community to react, if for no other reason than to present to the forthcoming World Conference in Stockholm on environment,[8] balanced and realistic theses which can find a more general acceptance by the World community.

The contrast of ideas which will arise at this meeting is, indeed, of no little importance; on the one hand, the just demands of more restrictive and severe regulations on the part of countries which bear mainly the bad influences of pollutions, will have to take into account the equal but opposite aims of developing nations which tend towards a rapid industrial start without the burden of additional costs for purification plant; on the other hand, there is a group of nations for which the problem is "non existant", they qualify the problem to be eliminated and, therefore, declaring openly their indifference towards every international agreement on the matter.

This is why the convening of the present meeting and the search for conciliatory proposals on a wider World basis seems today justifiable and opportune, being a historical European Economic Community task which cannot be deferred, for the special type of relations which it is establishing on the one hand with the economic industries mostly developed and, on the other hand, with the developing countries and those which reduce the problems involving the fight against pollution to a simple problem of rescuing a system which they condemn and want to eliminate.

2. It does not appear possible to deny the well founded of the request by developing nations not to bear heavier burdens than those of nations which were industrialized some time ago, i.e. when the economy of these latter were at the initial stage of their development process. In this connection it must be

8 The World Conference on human environment *will be held in Stockholm* in June 1972, under the auspices of the United Nations, with the participation of the European Community and many international governmental and non-governmental organizations In the time between this present *conference* and the Stockholm one there will be a meeting of the competent Ministers of the Community on the subject of ecology, also with the aim of defining a common position of the member countries, in accordance with the request made by the Italian government.

remembered that the basic inadequacies of a linear representation of such a process in which the quantitative expansion of production is matched to a qualitative transformation of the means of production, marked by real technological "leaps", so that the later ones find that they can never follow the path of those who have preceded them on the way to development. The essential indivisibility of the scientific-technical process prevents, therefore, a conception of geographical expansion of the industrial phenomenon as a simple transplant of the type of development already experienced elsewhere. In this sense, a strictly uniform ruling at international level would be doubly unjust because it would not take into account the different degrees of pollution, for an equality of plant and technology, of the investments made in countries recently industrialized and also because it would ignore beforehand the possibility that the geographical expansion of industrialization should occur in conditions such as not to recur at all, or to recur on a smaller scale within the process of territorial concentration of the industrial installations seen in the most developed countries.

As regards specifically countries with a state economy, amongst which are also countries with an advanced industrial economy it is worth noticing how the duality city-country has been far from unrelated to the historical experience of the latter countries, especially concerning the potential worsening of reasons of exchanges between industrial and agricultural products, which has sometimes taken the form of a regime of punitive agricultural prices virtually out of reach. Even recent examples of tension between regions with a prevailing industrial economy and regions with a mainly agricultural one within the sphere of a state controlled economy confirm our opinion that the geographical expansion of the industrial phenomenon, rightly considered as the main problem today, can be attained at all levels only through interventions capable of associating the primary activities to the benefits of increase of productivity obtained by the industrial sector, fostering simultaneously a real economic diversification of the less developed areas, a consequent different composition of the flow of exchanges and a new type of integration between sectors To consider the ecological problem as a necessary by-product of market economy means ignoring the close link between the deterioration of natural conditions and a process of territorial concentration of industrial investments which only partly and, especially as regards the past, can be object of utilitarian considerations, as to the profit of the enterprise.

3. This being dutifully premised, and in accordance with the principles that our European Community must necessarily choose to develop its own function as *mediator on World ecological policy*, the first problem to be now resolved is the one that goes to the very core of the present controversies, i e. the nature of the regulations to be adopted on a continental and World level for *the years ahead regarding industrial* pollutions.

It concerns a question which has become classical, i e. having to decide if

uniform standards of discharge on a supranational scale are prefe less rigid solutions are to be preferred in which the standards o discharges are set out in function of the degree of pollution alrea and of the need of recovery.

In spite of the objective preoccupations of those who fear that a l formity in determining the territorial standards may acutely sharp competition, or, anyhow, cause distortions in competition, the reaso lacking in favour of a choice of more flexible standards:

(a) In the first place, on a general level, it is difficult to admit th position of uniform standards on a continental or World level i suitable for realizing a concrete equality of initial situations b various competing industries. The internal production costs ste chain of situations varying from one enterprise to the other, tween raw materials used, their transport cost, the processes use and relative obsolescence of the installations. Uniform business indeed, few and there is no reason to believe that the impositi form standards for discharge of waste will count enough t initial competing situations so different from other items of costs
(b) In the second place, for economic and functional reasons. It is that the introduction of a uniform system of standards could effective reduction in the levels of pollution only in the measure chosen standard is situated at a level which is very close to t between the different national standards already in existence. be otherwise and if, therefore, the future average supranational be set at levels well below the best that exist, the final resu paradoxically be opposite to the objective aimed at, i.e. in the s the environmental situation of those countries which—for their necessity—up to now, have used high standards, would be com obvious reasons of competition, to depress the qualitative le hitherto. Should they then be forced to keep to their actual s higher than the uniform one, the result would be—in this paradoxically—to have caused, to their harm, objective situ disparity in competition.
Even accepting the fact that the future uniform standard should to the "best" levels, this could not avoid not producing conside ficulties for those countries where ecological situations are radically compromised, compelling industries set up within their ries to spend much more than necessary in order to arrive at the standard. In other words, the imposition of a uniform standard level could cause, in several cases, an excess of investments in the tion plant since the capacity of the water or air to be self-purifie remain partially unused at unnecessary cost to the enterprise of t try involved. Also, this phenomenon would not reduce, but s problem of the initial disparities in competition between one e

and the other above all, in the case where the *uniform standard in excess* should be imposed to countries outside the large supplying or consuming markets, or else, to countries in the process of development with a weak economic structure.

(c) Thirdly, and under these considerations, there are practical reasons which prevent the adoption of uniform standards on liquid and gaseous waste discharges, namely, the impossibility to reach agreement at *international* level on the minimum standard to be adopted. Countries of weaker economic structure could, in fact, see in the imposition of uniform supranational standards of high level, almost an attempt at industrial neocolonialism tending to push their industries on the marginal fringes of the market, above all, as has been seen, in the not infrequent cases where the respective capacity for dilution or dispersion of the polluting substances is far superior to those met in the more industrialized countries.

For all these reasons, may seem illusory the healing powers that one usually attributes to the imposition of a uniform standard on liquid or gaseous effluents of industrial origins in relation to ecological purification and even to the elimination of distortions to competition.

The most realistic and economic approach to the problem must, therefore be carried out in a more flexible way, i e. with the knowledge that the community or supranational regulations to be set out must allow for the fact that each country has ecological situations, necessities of environmental recovery and abilities of self-purification varying from one area to the other. Thus, the eventual agreements on uniform standards must interest—as we shall see shortly—homogeneous environmental units, that is to say, the individual water basins or lakes or seas.

Only thus will the future supranational ecological policy proposed by the European Community grow in credibility and feasibility, minimizing pollution levels at the same time that it allows a rational and economic use of resources.

4. Intimately connected to this first problem is, however, a second one of no lesser difficulty, namely, how to determine, in a flexible way—the admissible level of pollution and, as a consequence, the level of investments in purification plant in order to re-enter within the determined standard.

In this connection, once more, the opportunity is underlined of involving in future regulations single basins or sea areas evaluated case by case the country (or countries) interested, and establishing, in consequence, the principle that the standards of uniform basins must vary in time according to the evolution of ecological deterioration pre-existing; there are several general criteria to discuss in this matter:

(a) for example, the opportunity to specify for each basin—sea, river or lake—average uniform standards, that is to say neither too high nor too low;

(b) alternatively, the opportunity to grant precedence to only supranational

actions which tend to resolve pollution problems of a common basin, or to those actions which will oppose the export of pollution from one country to others.

This basic set up raises obviously many problems but it is perhaps worth remembering that the aim of a uniform decision on standards at continental or World level represents a desirable target which will be reached (if ever...) a long time hence, and that at present, between the setting of an enticing but impossible aim and the pursuit of aims which are less ambitious but, nevertheless, possible, the choice seems inevitably in favour of the latter. To this, at least, leads a realistic and pragmatic view of the problem.

This having been said, it is now necessary to see which are the technical criteria to use concretely in determining the allowable pollutions. In this connection the discussion is still open at World level and the present opinions are only meant as a simple start to common thought.

As is known, there are in this connection two positions somewhat opposed; on the one hand, there are those who consider preferable the method of "classification" of waters with a view to their optimum use. With such a method, once classified, (for instance the different streams on the basis of their use as drinking water, for agro-industrial or resort purposes, or for the elimination of liquid waste matter) one should impose for each body of water, quality standards compatible with the alloted function, determining the maximum load of pollution that such body of water is in a position to absorb. The subsequent distribution of such "pollution load" taken in total between the different users on the coast or around the basin would allow the evaluation of costs to be born in order to eliminate the waste which exceeds the maximum allotted quota.

On the other hand, there are those who maintain the usefulness of fixing rigidly the quality criteria of waste waters before they are discharged in the main waterways, in the sense that such waste must never carry pollution levels higher than a certain figure; this is the method of "standards on effluents".

From a theoretical angle, the first of the two methods suggested represents perhaps the ideal condition for industry in the sense that, thanks to it, could be known beforehand the obligations and the costs concequent to the location of a new plant depending upon whether the one or the other water mass with different classification, is used.

However, as has been amply shown, such an ideal situation carries the risk —at least in the case of countries already advanced industrially—of remaining at the potential stage of realization if only because human and productive conditions already existing and which discharge into water masses are already so dense and numerous as to render merely formal the subsequent division

and consequent unitary and global control. In the contrary case, the situations would be such as to prevent the siting of new activities unless this be done at ruinous cost in comparison with competing enterprises already established.

A quality standard on effluents applied generally and rigidly represents, on the other hand, in its turn, an excessively restrictive criterion which may carry serious but not always necessary burdens for the industries which may be compelled to settle in the vicinity of water masses requiring high quality.

As is almost invariably the case, the best solution is probably to be found in an interim stage between the two extreme positions mentioned earlier in that standards can be fixed for quality of the effluents which are extremely rigid for certain pollution factors (the toxic ones in general, the radio-active ones in particular), and more flexible standards may, instead, be used for the other pollution factors (muds and organic matters). This, of course, should take into consideration the existing degree of dilution and, above all, the best use it is intended should be made of the water mass in question.

Obviously, these considerations also form one more element against the argument of a uniform level to be imposed supra-nationally.

In the light of these considerations, this may not be the way to develop analytically the definition of threshold values to be applied for the protection of waters within the limits of a pre-fixed standard; in any case this is an argument which is outside the scope of the present report [9]

What is probably more important at present is the choice between one method of control and the other. It is at this level that it is possible to develop correctly, on this occasion, a general discussion on the preliminary study for the forthcoming World Conference to be held in Stockholm.

5. The problem being set as regards method, it remains to be seen how it is possible to avoid the distortion to competition which necessarily follows the application of regulations not uniform in time nor in space.

There is no doubt that such distortion could arise because of a different sharing out of expenses for the fight against pollution or, also, because of the different levels of pollution allowable or, finally, of indiscriminate exploitation of more favourable geographical conditions.

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[9] In this connection precise courses of action have already been expressed in Italy, circular of 2nd October 1971, No 166 of the Ministry of Health has been sent to all Provincial doctors, also to the Regions, and a prospectus indicating the threshold values to use in the measurement of pollution of effluents. This prospectus on which industry has shown some reserve also for the arbitrary applications which have occurred in certain cases, was inspired by the more analytical one of 1970, by the *Federazione (Italiana) delle Associazioni Scientifico-Technice* – FAST. Moreover, Parliament is discussing the project of law 695 setting out new "directions regarding protection of waters" which presumably should include the prospectus regarding the threshold levels in question.

At this moment the problem is the one already touched upon previously, i.e. whether it is on pollution itself that it is possible to oppose and demolish the serious distortions which, in fact, favourable geographical positions or advanced productive structures permit certain industries to achieve as compared to others located further away from the large markets or using obsolete plant and equipment.

We do not believe that an action tending to render uniform the costs of industrial depuration in continental or intercontinental areas is in itself capable of restoring full competitiveness.

We are greatly concerned, on the other hand, to establish possible measures which prevent, in all cases, the continuous attacks on the health of man and nature that could derive from fragmentation of experiences hitherto carried out or from the lack of any intervention whatsoever in this sector.

On the other hand, the fact of having already suggested supranational actions common in every case, in which—within the same basin—minimum standards can be set, or in those cases in which the pollutions of one country is exported is already an important step in comparison with a complete lack of any coordination or of no action at all.

On a short and medium term, it is possible that the policies of intervention suggested above keep alive situations of competitive disparity which already exist due to heavy incidence like other meta-ecological factors. It is also true to say that our suggestions do not reach the conclusion that it is necessary to let every country do as it wishes, but to the need to compel each country to do something; if nothing else, this will tone down and not emphasize eventual disparities already in existence.

In this connection, it is possible that international cooperation could do far more than has been done hitherto in other sectors, bearing in mind that in each country the top priority objective is preservation of citizens' health and not only that of operating on an abstract economic level.

It is not excluded, in the days ahead, that on a supranational level some minimum standards could be adopted which eventually bring closer together the various functional costs of depollution peculiar to each country. This will be possible, however, only when all countries of the continent have reached a common minimum level of industrialization.

In substance, the danger still remains that the flexible measures we have suggested may cause relative distortions in competitions and, that danger, we consider in all its importance. But, whilst it is arguable whether the danger deriving from so flexible a regulation is decisive as compared to many other more relevant factors of distortion, we would like to stress also that, not always, the aim of ecological purification coincides with the elimination of dis-

tortions in competition. In saying this, we notice that the most intensively possible pursuit of the first aim—under conditions of varying limited resources and ecological situations highly different from one country to another—does not allow to carry out to the best advantage the pursuit of the second and vice versa.

These are, perhaps, the elements to introduce at the imminent World debate in order to smooth national attitudes which are some distance apart and to settle States' interests so binding in one sense or the other, whilst being aware that the European integration can be the means of a "dialogue between continents" which is realistic and well balanced.

In other words, it is not intended that things should remain as they stand nor to expect that there be an unanimous agreement in the immediate future on a uniform set of regulations on a World basis. But one must start a closer link of the various situations by means of initial interventions that compel all countries situated around the same basin to do something in a uniform manner, taking into account the degree of pollution which already exists.

On the other hand, one has to deal with the quality standards of effluents, and apply very strict measures for the toxic ones and—at this specific level at least—it is difficult to believe that supranational solidarity cannot reach a fair and enforceable agreement.

6. As concerns the more limited sphere of the European Community, I personally believe that the common regulations to be defined in the ecological field must be inspired by the general philosophy of the Treaty of Rome in the context of which, the care to eliminate every possible distortion in conditions of competition, is always seen as an instrumental requirement to be reconciled through appropriate procedures with the pursuit of the general objectives of community integration. These lines are particularly evident in the provisions relating to aid from the states, aids which, although hit by a prohibition of principle, are in fact subjected in a large measure to a simple procedure of previous authorization on the part of the Commission Above all, this is valid for that which concerns objectives of balanced expansion, also from a territorial point of view which the Treaty explicitly aims at, and which the mere automatism of market could not allow to achieve as the historical experience of *industrialized nations* clearly demonstrates. The policy of prior authorization of aids must be seen, in fact, as an instrument given to the community institutions in order to oppose efficiently the tendency to glorify territorial imbalances which market integration tends naturally to emphasize An ecological set of regulations differentiated according to the pollution level reached by single geographical zones considered in their natural unity, independently from political or administrative borders could undoubtedly come, even if indirectly, within the scope of a community regional policy, as a reaction to incentivating or desincentivating effects which it could produce in the single zones considered. It is clear, however, that a perspective of this type seems acceptable only

in the measure in which it allows for the community institutions the availability of instruments capable of exercising a real control on the general conditions of industrial and urban development in the areas of recent industrialization, even with a view to avoid, at a later stage, situations of ecological crisis similar to those it is proposed to obviate elsewhere.

In other terms, the problem of a community discipline must be seen, in my opinion, in the general perspective of the coordination between the development policies put into effect in various forms by Member countries and the general objectives defined at community level by the programme of economic policy on a medium term. The possibilities to compare conditions pertaining to competition in the Common Market cannot, in fact, be considered abstractly in this or in other regards as a result of a mere effort of legislative harmonization, but it must be reached through increased political coordination in the context of institutional evolution imposed as a result of a real economic and monetary union.

III—POLITICAL ECOLOGY AND INDUSTRIAL STRATEGY

1. The principle being accepted that future community and supranational policies must tend, in a first phase, to issue common and uniform regulations relating to single basins and that, in any case, a clearly formulated and detailed control of quality must operate on standards of industrial effluents (strict where toxic effluents are concerned, flexible for muds and organic substances), it now remains to be examined—in the second part of the present report—which are the foreseeable repercussions of these measures on the future industrial strategy of our countries.

Amongst the various possibilities there is the main one of increase in costs of investments and operations of each industrial activity consequent upon the necessity of installing purification plant which reduce effluents of every factory within the limits established by the quality standards.

This increase in costs has been estimated to average 8-10% of the actual investment costs. Obviously, the amount of such additional costs may vary according to the process of manufacture, to the quantity of waste to be dealt with and to the suggested flexible regulations. It is, however, possible to state that such additional cost will remain, in general, within limits far inferior to those mentioned earlier[10] and that the increased cost can anyhow be reduced

[10] The Italian *Istituto per la Programmazione Economica* (ISPE) has recently estimated that interventions for depollution which can be scheduled in Italy for the second five-year period (1971–1975) could involve a total investment of the order of 1 200 milliard lire on top of about a further 620 milliard for amortization and the operation of plant already installed.
In estimating the probable effect of such additional costs on the whole industry, ISPE has concluded that by 1975 there would be heavier charges in the internal costs of production within the bracket of 1.5 and 3%: this would apply in sectors where the costs of depollution are the heaviest (chemical industry, oil and coal by-products and non-metallic-manufactures). In the other industrial sectors the increase in costs should be even less. Even with the usual caution where such estimates are expressed, they are well below the figure of 10% mentioned earlier.

later on in function of foreseeable installations for purifying treatment processes in addition to various fiscal and incentive reliefs granted to industries concerned.

In the end, and still with reference to a concrete proposal of suggestions to be made at the imminent World Conference in Stockholm, a set of incentive or relief regulations could be provided for which come close to the various national situations; these would place the burden upon the more industrialized states *to act where their industries are concerned*, and set up simultaneously a world fund for similar application of incentives and reliefs for industries of developing nations also required to be equipped with depollution devices for their own effluents.

At this point we are obviously facing not a technical but a political proposition. Nevertheless, we are convinced that such proposition could find a less difficult acceptance than could be thought possible today, at least to the extent that pollution does not know, nor respect, the traditional political and administrative boundaries.[11]

2 Another factor to be considered is the probable fall in some manufactures *also the gradual disappearance of other products of substitution in order to* prevent emission of toxic elements or of goods not wholly consumable and which are the source of soil and water pollution.

(a) This topic concerns mainly the packaging sector (see table 1).
The major expansion in the use of containers, especially those made of plastic material (polyvinyl chloride)—practically indestructible by traditional methods of treating solid waste—has, up to now, meant that incineration was the only possible solution for their destruction. In the case quoted, even though the plant fulfills its task of disposal, new ecological problems arise through the release of smoke with a high percentage of hydrochloric acid; these problems cannot always be expediently resolved by more advanced plant treating smoke itself.
It is, thus, foreseeable that in future it will be necessary to use substitute products which can be decomposed through action of atmospheric elements or by bacterial action or, at least, products with a limited polyvinyl chloride content; it is to be hoped, in this respect, that there will be scientific research on a World scale.
A return, otherwise, to traditional containers using cellulose as a base ap-

[11] There are numeous instances of this: the German Rhine pollutes Holland causing serious problems. The Dutch draw daily from the Rhine numerous samples of water which are given gaschromatographic tests and are analysed for trace elements after a concentration process. Recently, the Dutch have heard from the Germans that 10 kilogrammes of one of the most powerful pesticides were discharged in the Rhine daily; these reached Holland. As regards air, the Ruhr in Germany pollutes air with SO^2 which falls back on Sweden where it comes down as a solution containing one thousandth of sulphuric acid. There are practically no limits to atmospheric pollution (From the report of *Marini Bettolo presented at the hearings of the* Italian Chamber of Deputies).

pears to be an inevitable choice, even though it may be difficult to impose regulations of this kind.

(b) There is, moreover, the problem of reduction of atmospheric pollution caused by emission of fumes by over 250 million motor vehicles circulating in the World today. This is a problem for which the best solution is now being sought and is being discussed on the basis of the possibility and convenience of reducing the pollution factors produced by engines as designed today, or else, to replace traditional internal combustion engines by others of new conception: accumulators or heat exchange batteries.

In the face of this problem it is highly likely that—at least on a medium term basis—the choice will have to go to the first possibility, that is, either by a drastic reduction in the use of anti-pinking petrol containing lead, or with noticeable changes in the chemical composition of petrol. In any case, the technical propositions put forward in this connection for some time past, lead one to foresee for the next few years a noticeable increase in the purchase price of vehicles equipped with anti-pollution devices (higher by at least one-third compared with current purchase prices);[12] likewise, it is possible to foresee increase in running costs as a result of the entry into the market of vehicles equipped with electric traction.

Even with these views, however, the motor industry—vehicles and the petroleum industry linked to it—face heavy problems of reconversion and adaptation: these problems should not be neglected when laying out enterprice stategic projection, despite the impossibility for these industries to count—at this stage—upon clear and responsible regulations for their future programmes of reconversion.

These considerations lead to the hypothesis, worth some thought, of a reconsideration of the relative level of prices of a means of transport such as the motor car, causing a high degree of pollution, with the consequence of reducing considerably, in future, the rate of increase in private motorization, in favour of a vigorous revival of public transport. A development in this sense could, in itself, contribute towards checking the deterioration already existing in the ecological sphere, even if it is not possible to ignore the grave economic implications of a matter of such importance, in relation to the strategic function actually carried out by the production of this type of capital goods in the face of general economic expansion.

(c) A third problem of replacement concerns synthetic detergent products: not so much for the aspects assumed through dispersion in water as for their toxicity also in regard to the current pressing request to substitute actual productions of the "ABS" type of branched structure by others of the "LAS" type.

There are strong possibilities, in fact, that intermediary biodeteriorating

12 Recent press conference of Chairman Agnelli on the eve of the Turin Motor Show (November 1971) in this respect.

products can give rise to toxic effluents of a kind which is not yet well known nor specified; this is, therefore, a sector still open to investigation and experimentation even in the perspective of necessary substitutes.

(d) A later problem concerns the substitution of substances used today in the agriculture sector, such as chemical manures (which, washed away by rains, are carried into water courses, reaching the stratum) and, even more, the so-called pesticides—weed killers, insecticides, anticryptogams—whose use become increasingly frequent and indiscriminate resulting in direct pollution of strata. These substances are toxic to men and animals, even in very small doses (so small as to escape every analytical control), thus, along with the search for substitute products, regulations and stricter controls to limit their use are foreseen. The problem is all the more serious in that, as is well known, these toxic substances tend to concentrate increasingly in the successive phases of biological transformation. Relatively modest in the plants treated and mentioned earlier, these substances are to be found in larger quantities in animals which feed on the plants and reach a maximum in the carnivorous which, in their turn, feed on the latter, as for example the predatories, thus severely compromising fauna with the tendency of extinction of certain species, so compromising the delicate biological balance.

(e) As regards surface pollution due to thermo-electric stations (they load heavily the total emission of sulphur oxide), the way ahead is certainly still a long one; it involves the study of use on a large scale of substitute "clean" energy (natural gas, nuclear or, even though some way ahead, solar energy or energy derived from tides)

Meanwhile, one must look towards the construction of thermo-electric stations equipped with plant for the destruction of ashes and the retention of sulphorous oxides, also for control in the build up of smoke clouds (the "Lidar") whilst realizing that there do not always exist processes sufficiently tried out and of acceptable cost to maintain the price of energy at current prevailing levels

If nothing else, this implies a foreseeable ulterior factor of increase in internal costs of production for all installations using electric energy.

3. Along with the necessary processes of substitution, industry will remain interested in ecological policy involving modifications in production methods, at least those which cause pollution of soil, water or air prominently and consistently. All industrial operations must be re-thought; metallurgical ones (to reduce sulphur oxides and other sulphurous compounds, metallic oxides and carbon oxide dusts); factories producing paper, cellulose and artificial textiles (to reduce sulphorous hydrogen, sulphur oxide, carbon sulphide and xanthogenates); the cement industry (to reduce dusts rich in silicates); factories producing sulphuric and nitric acids (to reduce sulphur oxide and nitrogen); plants producing superphosphates, fluoridric acid and electro-chemical aluminium (to reduce fluorine and fluorides); the less important producers who use phospheric esters (pesticides) or emit organic residues (slaughter-

houses and tanneries). Under each of these headings of possible intervention, research and experiment are in progress on a World scale. The end result could lead to considerable innovations in production processes used up to now with foreseeable increases in unit and total costs and, therefore, with the consequent transfer of such a major burden falling upon internal and external prices.

4. Finally, whist it is obviously possible to foresee that the future ecological policy will show undeniable and concrete advantages to manufacturers of depuration plant or those companies responsible for their planning,[13] I would not disregard the present possibility of foreseeing in such a policy a pressing stimulus to different siting of existing installations.

If we refer to an opinion expressed some time ago by Pelletier,[14] we can, in turn, assert that an efficient help to dilution of industrial polluting waste follows the possibility of specializing industrial zones on a territorial basis, away from residential ones, taking into account a multiplicity of factors in the location of the former (predominant winds, existing water resources, possibility of carrying out common depuration . . .). This seems now preferable rather than saving a few isolated green spots in the midst of large polluted zones (as is frequently the case); to scatter amidst large wooded regions residential groups and industrial zones, the ones connected to the others by fast lines of communication. But town-planning solutions of the macro-territorial types are still an element of integration and not unique in the sector concerning ecological recovery, not being always evident because of the missing "large wooded regions" mentioned earlier.

Yet, it is clear that these solutions can mean a precious support; it is therefore useful, if not indispensable, to prepare a regional community policy so as to safeguard and improve environment, to put in value its characteristic, to stress the trends of territorial specialization of the "habitat" and to dilute—in the largest possible measure—concentrations of activities and populations now located in restricted areas.

In this connection, the latest aims of the European Commission[15] appear to be most interesting for their high grade of realism and concreteness; also, on this subject, it may perhaps be possible to express some information on syntheses useful for the forthcoming World debate of Stockholm.

Nevertheless, I would like to insist particularly on the result of our most

13 Consider the case of Italy where, of about 8 000 communes, only 120 are equipped with depuration plant for treating dirty waters; of these, only 32 have complete and efficient installations for the depuration of liquid waste....

14 *Opinion expressed at the European Conference on air pollution* – Strasbourg, July 1964.

15 See the First *Communication by the Commission on Community policy on environment* III/1050-3/71 – p. 20 et seq.

recent national experience, that is to say on the importance that—with a view to obtaining a thinning of present industrial concentrations—the combined effect of large infrastructural works causes, and of the policies of particular incentive for industrial siting in the more depressed agricultural zones.

Indeed, in most cases, the stimulus to decentralization of industries from congested areas to outside ones brings inevitably with it the burden of additional costs to the firms wishing to transfer in that they are required to move away from the large supplying or consuming markets (sometimes several hundred kilometres as occurs in Italy for the move from the north towards the south); they are denied the choice of location between areas insufficiently equipped in primary and secondary urbanization, serious business problems arise in the search for professional ability and intermediate contractors, these being available only on a very reduced scale where agricultural countries are concerned.

And yet, in the face of this kind of difficulties (sufficient in theory to deter any voluntary decentralization), the Italian experience after a decade of observation shows now that the combined effect of transport infrastructures and territorial incentives has given rise to environmental situations sufficiently favourable for the decentralization of hundreds of medium, large or very large industrial activities to the south (mezzogiorno).

In this sense, it seems to us that—more than insisting on the problematic possibilities of pacific co-existence between residence and industry within urban limits—the future regional community and the national policies of territorial readjustment must learn from ecological problems, as far as is objectively possible, the big lesson of participating in the dilution, on large spaces, of productive activities paying, however, in this case the right price in terms of sets of infrastructures and territorially selected incentives.

5. Set out in these terms, the ecological problem is mingled with the more general one of the layout of the territory—using this expression in the most comprehensive sense—more than the intense urban planning in the narrower sense, the structural changes to be carried out in the agricultural sphere, the sets of territorial programmes of industrial development and the coordination of development programmes relating to physical and social infrastructures. Like the regional policy, the ecological one must surpass in fact, in the shortest time, its limits of public assistance intervention directed to relieve certain uneasy situations, in order to become a "modus operandi" of the whole economic policy. In this order of ideas, the same perspectives of common agricultural policies which provide radical changes in agricultural structures with a radical reduction of those employed in agriculture and of cultivated land, impose on the one hand, the reabsorption of surplus agricultural labour into non-agricultural activities which prevent the present rural flight to continue, with the consequent exasperating imbalance, even ecological, between city and country whilst, on the other hand, turning to account forests of large geographical

areas. The latter measure is justified on grounds of ecological outline, of instrument to conserve a seriously threatened natural patrimony and of the social element to assure to the population a greater enjoyment of natural resources through the setting up of large areas to be used as open parks. From all these angles, the common agricultural policy could lead to a privileged opportunity for the foundation of a new relationship between city and country where the rigid contraposition between metropolis and countryside will be replaced by a functional integration between the two terms of the binomial, to be recognized only through a different demographic density.

That which counts the most to our ends is that within the ambit of the arrangement of the territory in the sense we have outlined and the creation of new employment outside agriculture should disturb the least possible the settling down of existing population with the social and cultural implications involved. One of the fundamental justifications for modern territorial layout is that of making the choice of locations inherent with industrial development with such criteria as to not compromise agricultural or touristic vocations of specific territories, and of encouraging, as far as possible, the establishment of a close relationship between complementary activities. The necessity to promote the largest possible diffusion of industrial development requires particular attention to infrastructures which must anticipate the demands, thus ensuring efficient incentives for decision to invest by private operators.

IV—FINAL CONSIDERATIONS

At the end of this expose—necessarily synthetic—of the problems and perspectives, we would, in concluding, hint briefly at the financial implications of such a programme and the actions and collaborations which they seek—on a national, continental and World basis—in view of its gradual pursuit.

1. As concerns firstly the financial implications, we must recall that the total cost of the various ecological recoveries assumes now in each industrial country a very high financial burden which can be valued in thousands of million dollars.[16]

It seems, nevertheless, undeniable that the cost of depollution should appear, in time, progressively inferior compared to the economic benefits deriving therefrom to national or supranational communities, apart from any other consideration of compulsiveness of such task.

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16 The latest ENI-INVEST enquiry, results of which were given by Ing. Girotti in Milan in November 1971, established for Italy a global depollution cost valued for the period 1970–1985 at between 7850 and 9000 milliard lire. Other recent estimates mention an expenditure requirement for depollution of the USA not not inferior to 11 milliard dollars yearly, of 2.5 milliard dollars for that of Great Britain and 2 milliard for France.

In any case, bearing in mind the necessity of putting into practice national programmes of depollution on all the main atmospheric, water or oil effluents without causing serious repercussions to internal industrial costs (and therefore to the price system) and on public finances, it will be obviously necessary to establish a schedule of intervention policies based on the following criteria:

(a) Privileged and guaranteed credits—on a medium and long term basis—to firms and local corporations which put into operation purification plants. These credits could be studied as an incentive to the speed with which the investments in question are used, therefore, related proportionately to a volume of investments gradually reduced with the years.
(b) Contributions in capital funds (i.e. non-refundable subsidies) to municipalities and, if necessary, to certain enterprises selected on a territorial or sectorial basis (for instance small size ones intending to put up common installations).
(c) Fiscal reliefs (intended as deductions of annual taxes on profits by a portion of the investment in such installations in addition to the normal depreciation allowance) for allowances, reduced gradually, on the additional investments involved in such plants.
(d) Charges to all polluting plants of the respective running costs in exchange for fair and recent contributions which would go instead to the municipality (sewer systems, incinerating plant and water purification of common interest etc.).

In the absence of an appropriate contractual rule between the sources of pollution and the polluted subjects, the financial system it is proposed to set up is that of making internal in the calculations of operators—aimed at the convenience of single operators—those costs which are rightly defined by Von Mises as "external",[17] whilst trying to level as far as possible the benefits and social costs connected with pollution phenomena and to the successive interventions of depuration. It will probably be necessary, in such a perspective, to link the proposed taxation on polluters with the introduction of not symbolical prices for the use of some resources, i.e. prices such as to reflect the scarcity of these resources. This is especially valid for water consumption charges and solid urban waste disposal.

In conclusion, we express the conviction that it is possible to finance interventions in the depollution sector, by making a joint appeal to public finances (for distribution of incentives based on the indivisibility of certain costs), and

[17] L. von Mises "Human Action A Treatise on Economics" London 1949. Outside cost is the utility loss born by an economic agent for physical reasons outside its control and not compensated by any commercial redress. Von Mises maintains that ".. in many countries proprietors of industries or railways are not considered responsible towards adjoining occupiers for damage inflicted by smoke, soot, noise, air pollution..." excusing such a situation by the fact that, frequently, one does not wish to "disturb" the industrialization nor the development of means of transport (the latter opinion is taken up by I Cheret in his book "L'EAU et du SEUIL", Paris 1968, p 67.

t taxation on polluters in the dual aspect of compulsory depuration or industry) and remunerative rates on fixed costs of depuration (for sumers).

cerning the actions and the degrees of collaboration that will have to ht for setting up new and more coherent supranational ecological the analysis developed up to now can involve the specification of the g proposals:

gration and bringing closer together of national legislations within the it of a supranational and flexible set of regulations.

vill be necessary to decide upon uniform regulations for all countries oining a same water mass (sea, river, lake or territory) in which rigid ndards are determined on toxic effluents, and standards which are, on other hand, included between minimum and maximum values for se which are not toxic. In determining such regulations for basins, ount must be taken of the pollution degree already reached and that ch is foreseen. Also within the orbit of a supranational general regula- must be prescribed, in a uniform way, for the interior of such basins, system of incentives in favour of the construction and operation of uration plant for industries and local corporations.

ibution of authority to the European Community institutions for the tion of controversies relating to the sector and for the gradual bring- together of the various regulations of water basins, also plans of imum requirements for observing and controlling the fulfilment of the ılations.

gestions for establishing organisations in each country for the fight nst pollution, also with a view to facilitate international discussions cerning projects for the basin or on a larger territorial scale.

rying out a coordinated research progamme on a community basis subsequently on a continental basis, to obtain a better knowledge of ution phenomena, to improve methods and techniques of measure- nt, of interpretation and elimination; to study and suggest substitution ecessary products or reconversion of industrial polluting processes.

h programme could start with the setting up (already proposed to the opean Commission) of a European Institute for Ecology with, attached , a centre for uniform observations and controls.

nediate adoption of technological measures for each basin on the s of specific "projects" (as for instance the "Mediterranean", "North " projects, the "Rhine basin" project, etc.) indicating toxic pollution ors to be reduced with the method on effluent standard, also suggest- integrated ecological solutions satisfying water requirements of in- ry, not by drawing it from water-bearing strata, but as sewer water to depurated and recycled in the sewer circuit with reduced levels of pol- on[15] and, in any case, always devoid of toxic pollution.

od has already been succesfully experimented with by IRI in the steelworks of Bagnoli (Naples), a need of about 1400 cubic metres of water per hour. Dirty liquids are removed from the sewer, and admitted to the production pricesses; afterwards it is returned, more depurated than at first. politan sewer.

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3. In conclusion, we can assert that the need of a community ecological policy coincides with that of the best use of resources available and with the rationalization of sector and territory in the subsequent development of our economies. These objectives could not be reached only as a consequence of setting up a customs union pure and simple, not only as regards the spread of development, but as a result of the construction of an integrated productive structure with particular regard to vanguard sectors, given the importance of the financial means necessary, where otherwise would be lacking common instruments of orientation for technical-economical development and integration between public powers and private operators. In this perspective the ecological policy appears as a necessary link between industrial and regional policies and it must propose to contribute to the diversified expansion of productive activity so that it occurs within the community sphere in such conditions as to promote, not only the general improvement in living standard and harmonization in the progress of conditions of life and work of the populations of member countries, but also, to minimize additional costs inherent to territorial imbalance, whilst increasing the relative efficiency and, therefore, competitiveness in enterprise inside the economic structure.

All of which involves the recognition that within the ambit of an economic and monetary union, the problems of equilibrium between the balance of payments of member states tend, necessarily, to be identified with those of territorial development, necessitating a comprehensive view of problems related to development and redistribution of profits which go with their solution. From this stems the requirement of a community institutional structure politically strengthened and provided with adequate instruments of intervention. The ecological problem has, in a short period of time, become known to public opinion; it has the merit of making immediately understandable the interdependence between the different aspects of an imbalanced growth which the market integration has experienced hitherto in the community without adequate political counterbalance, and tends in itself to amplify. The increasing tensions experienced in this connection by countries of immigration are particularly significant in the presence of large concentration of foreign labour, mainly employed in activities and duties which national labour refuse to fill and, therefore, excluded from the social life of the host country. These tensions, coming on top of the ever increasing ecological deterioration, spoil in a way which is more and more apparent the quality of life in the zones considered up to now as being privileged and which run the risk of losing, even more than others, their historical and natural identities. For their part, suburban regions feel increasingly a demographic drain which is not compensated by a current of tourists nor by replacements of emigrants, whilst the free circulation of workers loses its social significance, in the absence of an availability of jobs "in loco" that makes of it a free choice and, therefore, a socially promotional factor. Moreover, even industrialization occurs, sometimes, on the strength of a constraint in the choice of location imposed by circumstances outside a rational plan of development of the region interested and, in contrast

agricultural or touristic vocations of the districts, because of the frequent urse to technologies which are outdated and ecologically polluting.

knowledge of these contradictions will tend to make itself all the more ͻ as contemporary Europeans acquire the conviction that deterioration in ity of life, in its ecological aspects as in others, tend to put in new terms ılations interested, in the decisions from which their future depends or a determined understanding of the development which tends to project in 'uture the evolution of the past, without taking duly into account the new irements. The protest against such aspects by the present labour organiza- despite political speculations which are built around them, comes also, ıately, in this type of claim and puts in cause the undoubted waste of an capacity inherent to the present system. All the problems relating to .ty of life goes hand in hand with an insufficient participation by the 'elationship between industry and society, underlining the priority to be ı to a global growth of man, which is the supreme aim of the development ɜss.

necessity to participate and the ever increasingly wider knowledge of a :antial identity of motivations between opposite manifestations of im- ıce which afflict at present industrial society, make all the more evident the European character of the problem requires a reply which is really to ɑeasure of the problems. From an ecological aspects, the recent adhesion e European Community of the four candidate countries opens favourable ɔects of the presence in certain of these countries, such as Ireland and vay, of ecological situations which are still privileged, and for the high ;e of awareness and technological progress which characterizes Great in in this respect. A community ecological policy solicits, however, by its 'e, a direct dialogue between the common institutions on the one hand and, ıe other, the social partners and local authorities in the search for solu- which can never be definitive but must adjust continuously to the whole .em and to the extreme and varied aspects of the real situations.

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Source: D.

Consumption of plastic materials in the United Kingdom, Germany and the USA

Country	UK	Germany	USA
Population	55 300 000	60 700 000	201 000 000
Consumption of plastic materials (tons)	1 105 000	2 549 000	7 143 000
Used for packaging (tons)	250 000	503 500	1 450 000
Percentage of the total used in packaging	22	17	18
Waste (tons)	16 000 000	15 000 000	90 000 000
Presence of plastic materials in waste (%)	1.56	3.35	1.6

Source D M Sharp *"Problems of earth pollution"* London, 1971.

CONSEQUENCE ON INDUSTRIAL DEVELOPMENT AND THE LOCALIZATION OF ENTERPRISES OF THE ACTION FOR BETTER ENVIRONMENT(*)

J. LAOT

We have probably taken a risk by choosing to deal with the subject in this particular way. We are nevertheless convinced of the necessity of such an approach and this for three reasons:

(i) First of all Trade-unionism: we know by experience how much the application of legislation is dependent on various forces. Accordingly an attempt has been made in this report at identifying the threshold of Tolerance, to recommend this or that formula and to define whether the State, the employers or the consumers should bear the cost of antipollution measures. In this report we shall explain as we go along, the reason for acting differently.

(ii) Secondly in order to appreciate "the impact of the struggle for better environment on industrial development and the location of enterprises", it is essential, considering the indefinite meaning usually given to "environment", to define our own idea of the word. This brings us to consider more precisely the consequences for cities of an industrial development in which the motor car industry holds the lion's share.

(iii) Thirdly we cannot ignore the origins of what is now the world's major concern: environment. Up to now, nature has been robbed and made to sweat like a human being, the workers or the populations of the colonies. People have died and are still dying because of certain nuisances, but this has not caused much concern to the conscience of ruling capitalists. Now suddenly, environment control becomes necessary but is expensive. To make this new burden acceptable, public opinion is mobilized. Consequences on industrial development, yes, but motivated by what?

For these reasons, before agreeing to assume responsibility for writing and introducing this report on behalf of the "CMT",[1] the "CFDT"[2] requested to be allowed to tackle the more general aspects of the problem rather than the too technical and limited framework proposed. Nevertheless, the tackling of these general problems still keeps us within the limits of the report to which we agreed.

(*) Translated from the French

1 *Confédération Mondiale du Travail.*

2 *Confédération Française Démocratique du Travail.*

A last remark: this report is essentially "CFDT". It was not our deliberate choice. Owing to lack of time, and taken up by our routine trade-union activities, we were unable to contact other European trade-unions. Therefore this report deals with the behaviour of French capitalism in respect of environmental problems. It does this in a specific way, taking into consideration the balance of forces existing in France, whilst at the same time following the general trend of world capitalism. This debate will undoubtedly enable the gathering of essential information and make for this deficiency.

The first part of the report specifies what we mean by environment and its importance in the development of human individuals.

The second part concerns the origin of present conditions.

The third question relates to the extent to which there exists the will to really solve environmental problems.

The fourth will show, through our French experience, our scepticism about how efficient additional control measures would be, unless power for enforcement were to exist.

The fifth analyses the true motives of the current campaign.

Lastly, we will make some suggestions bearing upon industrial development and the location of enterprises, for the purpose of improving the environment.

Definition of environment

Should this report define environment? We do not pretend to do so for the whole seminar and have no intention of imposing our ideas to anyone. But our approach would be misunderstood if we were not to explain what we mean by "environment".

Usually, it means nothing else than conservancy of Nature (given a capital N for the occasion), pollution and nuisances fighting off. One usually doesn't go further. It is sometimes a matter of town-planning, but only in the shape of architectural qualities, volume balance, etc...

It is a clever way to describe environment! ... Such restriction allows to by-pass essential fields of action which directly concern industrial development and the location of enterprises. We mean the quality of living in cities, in conobation. Yet their conception is conditional upon (at least in France) options regarding, among others, the expansion of automobile industry.

To avoid any erroneous judgment, one precision need be stressed, we are set on technical progress, for industrial development contrary to the case brought only too often against us. We are set on industrial development aiming at the quality of human life, at developing their personalities and for that reason concerned by the subject of this colloquy.

It has been known a long time, but recent human science advancement demonstrate it even more so today, that building-up of human personalities, their cultural field, are conditional upon the importance and nature of individual or group relationship, with others, with solid and economical structures, with objects. Surroundings influence on one's personality is determining.

Human beings are always uncompleted cultural products, to be built in a life-long question of dialectic relationship. Each one is a product of the city or the country, his land, his soil, his family, his social class, his human group. A child is not born thief, delinquent or honest, he becomes such. To what extent did many children become juvenile delinquents for lack of cities thought and built to fulfill their needs, to allow them to express their creativity and exercise responsibilities?

We are aware of stating nothing new, but what is obvious must be constantly reminded, not to be forgotten and made allowance for in the solutions brought to new problems. This approach to environment broadens its importance far more than the actual boom on nuisances for their worth.

In this human environment, relationship with natural elements such as: air, light, vegetation, space, etc... is only one viewpoint among many. This viewpoint is important but must hold its place among others just as valuable. More and more development of conobation compels one to live in surroundings built by men. And we all know to what extent this built up area is dilapidated, fallen victim to choices guiding the use of resources towards the expansion priorities of industry.

A business group belonging to the French VIth Over-all Planning, responsible for a report on "educating towards tangible knowledge", was considering the possibility of such teaching when:
"the major estrangement in developed countries at least is from now on that of the surroundings of city life: exhausting transportation, to and from work or to obtain remote utilities, sundry and ceaseless noise, small non-evolutive living-space and rigidity of prefabricated city surroundings or dismalness of anarchic suburbs, inhuman contacts with "the others", no longer village or borough neighbours, but anonymous individuals behind the steeringwheel of an aggressive car ...".

The group pointed out the loneliness of people in cities (but is one still allowed to call them thus?) built to accommodate manpower and it added:

"Except in a few ancient boroughs and sometimes in new realizations urbanized man no longer has any territory, real roof, secret corner. Life goes by while expecting and pursuing something else; television, crowds in transit on roads, searching for the freedom of nomads and rediscovering their laws and gatherings, or on a quest for lost houses."

Because of this approaching of the problem, the trade-union colloquy CESL/ OE.CMT on environment and life surroundings which met in Luxembourg the 1st, 2nd and 3rd July 1971, declared:
"Prejudice becomes even more impressive, as soon as one meets the consequences of industrialized groups on the psychism of people who live there:

(i) these groups favour first the development of a technical mentality which doesn't broaden, but rather restricts man's cultural horizon.
(ii) partial information and undue publicity which are boundless, will manage to overpass the critical possibilities of man's mind where they'll entail dangerous disorders.
(iii) Very often exaggerated proposals of so-called cultural accomplishments estrange man and divert him from the real problems.
(iv) Finally, in our groups balance of men becomes precarious, one needs only bear in mind the massive exodus of city dwellers towards the country during the week-ends!"

Consequences for human beings are not only periodical catastrophes resulting in many deaths (Meuse valley in 1930, London 1952 (and) 1962, shipwreck of the Torrey Canyon in 1967).

Neither is it apocalyptic situations for the forthcoming decades. It is this very day, notwithstanding progress realized in the field of health, insiduous attacks to the physical and mental health of millions of people. By adopting a narrow definition of environment and by hiding some of the results upon everyone's personality, upon society, upon civilization, one thus avoids connecting this situation to the very type of industrial growth. One comforts him by proposing as goal, going faster in the same direction, but polluting less. This trend must be refused and the causes tackled, and to do so, they need being made clear for one and all.

What brought this situation into being

To act efficiently, it wants acting on the causes. An indication as to what brought on this situation is given by those in charge of the environment crusade.

The highest ranking French State authorities don't hesitate to say that there is some talk about "creating and spreading some sort of environment ethics

imposing upon the State, the communities, the individuals the respect of so elementary rules, for lack of which the world would become irrespirable.

At other levels a no lesser ambitious definition is given "That will make Environment Policy a universal humanism." If the breadth of the spe provokes a smile, it is nonetheless true that the problem is fundamental. Mo over this has been written for a long time.

In his book "Technics and Civilization" (published in 1934) Lewis Mumf describes the falling out which occurred in european society with the birth capitalism:
"There was an abrupt shifting of interest, from life values, to money assets. It was no longer sufficient to live from industry, independent wealth was must. Work was no longer a life requisite, it became an important purpose itself... There, is a phenomenon almost unique in the history of civilizati not a downfall into barbarism by the sinking civilization, but a thrust of b barism helped by those forces and interests which originally had been at t conquest of environment and perfecting of human culture."

This turning point in civilization "The great demographic and industrial o burst which took place in the XVIIIth century is due to the introduction coal as a source of mechanical energy, to the use of new means to render t energy effective—steam engine—and to the new methods of smelting a working iron. A new civilization is born of the iron-coal compound." T civilization, this "carboniferous capitalism" will spread its consequences human environment and workmen.

"The sudden accession to capital in guise of these huge collieries, immers humanity in a fever of working. Coal and iron were the hub around wh circled other society services. The XIVth c. activities were absorbed by succession of rushes, gold-rush, iron-rush, copper-rush, oil-rush, diamon rush. Mine spirit earmarked the whole economy and social structure. This p dominant working became the type of subordinated industrial method. T ruthless attitude, 'make money', 'woe unto the last' (attitude of mine rushe spread everywhere. In the USA, Middle-West farms were worked like co mines, forests were drained and mined like the ore of their hills. Humani behaved like a drunken heir. Damage to civilization engendered by the supe ority of new destructive and reckless habits remained, whether the source energy disappeared or not. The psychological results of 'carboniferous' capita ism: weakened ethics,—wish to get something for nothing—contempt for ba ance between consuming and producing—practice of sacking, as if waste w part of normal human environment—these results are obviously fatal."

"In this paleotechnic world, realities were money, prices, capital, assets. E vironment, as well as Human life was treated as an abstraction.

Air and sun, because of their deplorable lack of exchange value, had no 'reality.' Whence, water and air pollution, urban concentration around factories entailing 'a reduced social life, an impoverishment of intellectual resources'."

Through this period of capitalism, "the workman is considered only as a cheaper mean of mechanical production. Human beings are treated as ruthlessly as the countryside. Manpower was a supply to sweat, to mine, to exhaust and finally cast aside. Responsibility towards the life and health of the workman ended with the payment of the workday salary."

The reciprocal alienation of capitalists and workmen was clear: "In the pursuit of profit, the ironmaster or the owner of a spinning-mill was driving himself almost as hard as his workmen. He deprived himself, put himself on short allowance, cut down expenses, by stinginess, will of power, like the workmen had to do by sheer necessity. The quest for power made the Bounderby hold life in contempt almost as much for themselves as for their wage-earning slaves. If the workmen were hurt by the tenet, their masters were just as much."

This description of Mumford of a condition marked by the lure of profit and power, the contempt of human life and nature, is caracterized in his own way by Marx who shows how capitalism "fanatical agent of hoarding, pushes men without truce nor mercy, to produce for producing . . ."

These quotations describe a bygone period. But in spite of the progress accomplished in different fields, is that one in which we find ourselves now fundamentally different?

The condition of workmen in the firms is only mentioned as a reminder, since another report deals with the subject. But to proceed to work, daily becomes a worse plight. At the present time, in the Paris area it takes usually 1½ hour and often 2 hours to commute. On the average, each workman spends yearly 50 workdays in transports.

And what about the conditions in which this travelling is accomplished? An inquiry undertaken in 1969 by the Public Authorities points out in figures what workmen knew since a long time:

(i) at peak hours, the underground is made use of at 100% of its capacity, when, as it frequently occurs, it doesn't exceed 110% (7 persons per square metre, if not 130% on certain lines (8 persons per square metre without reckoning the time spent waiting in corridors or on platforms;
(ii) the speed of the metro underground hasn't changed for 50 years (22kph) and 74% of its rolling-stock more than 30 years of use;
(iii) buses are ensnared in private cars, their speed limit passed from 13kph in 1953 to 9kph in 1969. Since, it slowed down even more, in spite of different measures taken in the hope of coping with the situation.

This state of affairs is a burden, particularly to workmen, because real-estate speculation rages about all the operations of town renovation. By constantly raising the price of land and the cost of building dwellings, it daily drives out of Paris workmen and obliges them to live farther and farther from their working places.

Long lasting commuting increases. At the present time, there are 3 to 4 peak hours a day. From now till 1975, there will be 5 or 6 consider the sponsors of the inquiry.

Outside the firms, in the transportation directly linked to the work and to the reciprocal localization of firms and homes, the workmen's weariness will do nothing but increase. To the cost of living, hardships, reducing of working time, is added transportation costs.

As one is inclined to believe, the actual condition arises from the logic of an economical system based on the frantic pursuit of profit, power, on the will of domination. This logic is accepted by the ruling classes regardless of the outcome on nature and human beings, as long as their own power is not imperilled.

Then a question arises: "may environment ethics", "the universal humanism" mentioned in speeches, be a result of the work of contractors similar to their description given by a booklet of the Ministry of Industrial and Scientific Development, dedicated to innovation (p. 166).

"But these characteristics are not sufficient. To become Contractor implies an unfaltering will to be one's own boss and to take the corresponding chances. This state of mind is born partly from the wish to make a fortune, to become powerful and influent, to show the signs of material success and to attract consideration."

If that is the needed state of mind to bring forth innovation, innovation introduced as an "industrial imperative", even if there is further indication that "one of the privileged goals of innovation may precisely be environment control, if the progress of the material surroundings of human beings may arise from a quest for success of some "Contractors", the problem remains whole at the level of social relationship, of human surroundings. The inefficiency at that level justifies the doubt cast on the idea of a "universal humanism" based on the "Environment policy".

Is there a true desire to solve this problem?

This question must be asked as well, for everybody may notice how much the

current campaign exploits skilfully and carefully certain sides of the problem, while forgetting others.

The problem we have discuss comprises two aspects: on the one hand there is pollutions resulting from production (water and air-pollution by factories disturbing noise levels for those who live or travel nearby) on the other hand there is the pollution and the nuisance caused by the use of manufactured goods. At the present time, emphasis is not equally laid on those two aspects, particularly when a question arising on the use of a product touches an important sector of industrial activity.

Our thesis is based upon our observation as to how the pollution and disturbance caused by the increasing use of cars in towns is analysed.

This example has been chosen because it typifies at best the limits imposed for all aspects of their control by the type of industrial development in which we are involved.

Air pollution and noise

In France a government business group was entrusted in February 1971 with the study of the damage attributable to motor vehicles, and to develop concrete and motivated proposals aimed at reducing it.

Within a few months it established standards to be progressively enforced on cars, in respect of air pollution and noise. It underiined the technical limits of the abatement and the time frame for their implementation. In actual fact, allowing for expansion in the use of motor-cars, the measures taken in 1972 will allow in the worst cases that the present level of air pollution will not be exceeded in 1985. As for noise, a car accelerated to 50kph, and starting from a stalled engine, is still comparatively noisy.

But the group insisted a great deal on the cost of anti-pollution devices:
"...The economic aspects must be carefully examined. Price increases due to anti-pollution measures could have tangible side-effects on the automobile market, particularly as regards the market for small vehicles.

...Priorities must be determined carefully. Improvements in motor vehicles may, in fact, concern performances, safety, comfort, noise, pollution...

Each time a decision will lead to an increase in the price of motor-cars, say by frs 100 (f.f.), a yearly output of 2 000 000 vehicles will be involved and it will thus cost the consumers an added frs 200 000 000 and the advantages accruing to the public will be difficult to calculate with certainty; furthermore there will always remain the doubt whether another more rational solution could not have been made."

We may, incidentally, note the trouble taken by the group to make rational choices in respect of the effects which anti-nuisance devices may have. But will manufacturers (all represented in the group), have the same concern when they will be deciding alone the increase in their cars' performances, and in advertising these in order to sell them?

Have they any concern for the consequences on the public? What about the 14 705 dead and the 318 582 injured of 1969 or the 67 thousand million frs., per year cost of accidents, as shown from Reports by the National Road Safety Organizations?

Do they take into account the consequences which greater use of motor vehicles have for the deterioration of city centers, an important matter to which we shall revert later?

It is true that the price increase of cars acts on the whole market. The group calculated that a yearly increase of 3 % up to 1980, would result in the number of buyers being reduced by 11%. Does this mean that manufacturers will cease improving performance?

And what about this quotation of the report:
"To apply the proposed measures would mean on the whole, increasing the price of the small vehicles more than the price of the large ones, with a consequent narrowing of the range of cars available. The cost increases would have less impact if the legislation were to allow small vehicles to be extempted from expensive anti-pollution devices. It should not be forgotten that in 1970, 37 % of the vehicles manufactured in France had a cylinder capacity inferior to 1000 cm³ and that such a market must not be tampered with too drastically, if severe economical after-effects are to be avoided."

These views are stated frankly, but in another part of the same report this flexibility in the rules was justified because future motorists "obliged to forgo buying a car and thereby feeling frustrated."

The group concluded by recommending that legislation be progressively introduced, that research and its functioning be expanded and the share of Government financing required by such projects. Mention is also made of a new, less noisy and non-polluant vehicle in the offing.

At this point, the group considered itself qualified to submit proposals on town-planning and its ideas on sound-proofed habitats. It is however significant that it did not question the use of cars in cities, nor the possibilities of expanding public transport. This however is the real problem.

The quality of life in our cities

It seems that citizens and especially workmen are made to believe that humani-

ty is at grips with mysterious entities ... Didn't The President of the French Republic mention this problem himself:
"Are not cities, centres and symbols of all civilizations destroying themselves, and engendering a new barbarism?"

Looking at the matter objectively, the destruction of the city is the work of the ruling groups which control the economy and politics, who shape it and alter it to their own best interests. Such groups take no heed when pressed by committees tasked with the impossible task of reconciling the mounting problems of urbanization with the quality of social life, the development of green belts and the immoderate use of motor-cars.

From this point of view the non-polluant vehicle will not solve the problem. Parking space will always be necessary as will thoroughfares, as bottle-necks and traffic-jams and stalled buses will only increase.

Undoubtedly air-pollution and noise will decrease, but the "rest" won't change. And this is the most important, not to say the essential point because the building of social dwellings, the preservation of green areas will be impossible because of the investments will be needed for the laying out traffic lanes; this in turn will orient not only the industrial development, but will affect the standards of life and even civilization itself.

To conclude this subject, I would quote M. Eisenmann head of the Road Safety Interministerial Office when he declared, in opening a round-table on "Cars and City traffic":
"The fundamental problem lies and I will ask town-planners to state their point of view in the opposition existing between the city, conserved for bringing people together, meet and know each other and motor-cars who prevent this happening, use all the available space, creates broad and noisy streets, as well as the loneliness of men in their cars."

An other quotation is from a report, presented by Inspector M. Le Courierec, to a meeting of civil servants from local administrations on the subject of protecting populations from the aggressions of modern life held in November 1969 and dealing with modern town-planning:
"There is too great a tendency to subordinate town's blue-print to traffic requirements even though the latter is a cause of so many hardships for the population. When city renovation was undertaken, it levelled old quarters without giving due regard to architectural treasures or to certain buildings being a heritage of the past. Financial interests and real-estate speculation being at stake, aesthetic considerations or old stones didn't weigh much."

This is quite clear, but far quite different from the previous quotation according to which "the city destroys itself."

Consequences on the attribution of resources

Another study by the Administration of the Paris area having mentioned the increasing remoteness of new dwellings underlines the impossibility of mastering the expansion of motor-car traffic. Looking into the future, it gives examples of alternatives for the allocation of resources: 1 km or roundabout boulevard equals one hospital of 550 beds, or a kindergarten for 30 000 children, or nearly 800 four roomed dwellings. During the 5 years of the Fifth Plan (1965/1970) the government used up 96 % of its public transportation budget for the Paris area whilst this same area's local administration allocated 76 % of its budget to transportation and the City of Paris itself invested 53 % of its equipment budget also for transport. In spite of this huge effort using up national income to the prejudice of provincial cities, traffic in Paris and its suburbs becomes worse and worse. This is true for all large cities.

If one adds that land earmarked for sports grounds and schools had to be used to build the periferic boulevard which turns out to be inadequate even before its completion, one may fathom the social consequences of the inordinate use of cars in cities.

From now on, measures must be taken . . .

These considerations on the consequences of the use of motor-cars in large cities, and this recounting of obvious facts, will be countered by: "You are against progress, one can't thwart people's wishes". Nevertheless, it is more a question of forbidding all traffic in the city centres.

The issue is raised in the outline of the Town plan of Lyons. At the present tempo, the city centre needs three times as many car-parking spaces than is actually available.

Was not the same issue at stake, when the Brussels' firemen couldn't reach a large department-store on fire? More recently in Paris the same problem occurred with less dramatic outcome.

Which large city dweller, faced by the mass of vehicles stalled in the streets at peak-hours, hasn't wondered anxiously what would happen in the case of disaster breaking out there and then? How many lives would be lost for lack of help which cannot arrive in time because of traffic-jams?

If such an event were to occur we are sure that public opinion would demand strict regulations, unacceptable today, being applied to car traffic. Is it really impossible to change the present situation now? Everyone is aware of the cure: a considerable development of public transportation. Experiments are now being tried out:
"Marseille tried, between the 7th and 27th of October, to 'bring car traffic to

heel' by combining a partial 'no parking', especially in the heart of the city, with priority being given to public transportation and with the additional opening of 9 kilometers of lanes reserved for buses and taxis. More than a 1 000 cars were impounded by city services because of irregular parking.

Marseille today has more than 300 000 registered cars and 6 000 000 square meters of paved roads equal to 20m² per car. The number of cars is multiplied by two every ten years. By 1980, it will reach 600 000, or one car per two inhabitants, as in the USA. If care is not taken, the city will smother to death. Those, most satisfied by the experience, were local people using public transportation.

"Buses travelled faster and more regularly: they were coming through every five minutes on the North-South axis. Journeys were faster and cheaper for taxi-cab customers. As for pedestrians, they felt at ease in cleared up streets. On the other hand, the heart of town tradesmen complained about slackening business. The city authorities consider that time must be given for customers to get accustomed to the new means of transportation put at their disposal." (Le Monde, Feb. 11, 1971).

... but are slowed down by pressures from the motor-car industry

However, the motor-car industry is an efficient pressure group. It holds a determining place in industrial development. It must provide 90 000 out of the 250 000 jobs foreseen, and earn 1/5 of the foreign currency income during the VIth Plan (1971-1975). This industry is sufficiently dynamic not to need any specific incentives, so the report about the VIth Plan adds:

"Generally speaking, a slowing down of demand on certain markets, due to threefold reasons, should not be overlooked:

(i) a research for costly solutions to the emphasized problems of safety and pollution will weigh down heavily on production costs and an expansion of the market;
(ii) the problems of city congestion take on such proportions, and their solution implies such vast infrastructure costs that the possibilities for market expansion of the highly developed countries are limited;
(iii) competition on foreign markets necessitates a diversification of models, with consequent increased production costs and reduced earnings."

"Public authorities will have to be constantly on the alert, if the automibile industry is to solve its problems in the years to come, and is to maintain its place in economic development.

Deeper thinking about the future of this industry in its relationship with transportation and town-planning policies should be undertaken in order to

determine precisely what will be in the long term its share in the development of the economy."

This is probably the reason why more public gardens will be destroyed to make room for car-parks, and more thoroughfares will be laid out, such as the one running along the right bank of the Seine. The subsequent protests reached such a level that they will be taken into consideration before the left bank thoroughfare is laid out. As a result costs will be higher but cars will continue to circulate. Until when?

The motor-car industry is the best example for illustrating the limitations of pollution and nuisance control. Industrialists and government officials admit the need for rules and regulations but, on the one hand they must be very progressive and on the other hand they mustn't imperil industrial development as it exists today, whatever the consequences on daily life. And yet, as we'll see in the next pages of this report: present regulations are not being applied and the existing guidelines for the location of business firms and the control of town-planning are willingly overlooked.

Is additional regulation needed?

The case made for cars in the preceding chapter may be extended to other polluting industries or those whose products cause pollution: airports, food supplies, plastics, steam generating and atomic stations, etc. . . .
One thing is alike in each case: pollution and its causes are known: in many cases research has discovered the means for control, regulation exists, . . . but is not applied.

The same is true for the location of factories, that is to say town and country planning. relocating a pollution prone industry means relating it to residential areas. There again, in FRANCE, documents exist but are not used, at least until recently. The following quotations will illustrate the point:

In a report established at the request of the Senior Environment Committee, Monsieur Rouvier stressed the need for a single authority to be responsible for applying legislative and administrative regulations:
"On the one hand, irresponsibility, as defined by civil and penal law, is common fare; discussion on text drafts seems to be preferred rather than ordering the application of existing rules aimed at stopping the poisoning of water, air, animals or inhabitants; these rules would bring about an efficient, economic and immediate control of pollution."

Another quotation, this one from a report by Monsieur Armand: "For an Environment Policy."

"In theory several texts for repressing the degradation of the environment, for controlling real-estate development do exist and would enable public authorities as well as collectivities to discipline urban growth. But they are only partially applied and used, either because fines and penalties are too slight, or because several escape clauses granted for different reasons reduce their efficiency."

The reasons for this state of affairs are well known.

On the one hand, the lack of control procedures. In 1969, the Chief-of-Police of the Seine department stated: "To supervise some 30 000 classified establishments under our jurisdiction, I believe we dispose of 2 Chief Inspectors and 26 inspectors assisted by 23 supervisors."

On the other hand, the way in which law enforcement is organized. Let me go back to Mr Rouvier's report:

"Not only are organizations, devoted in name at least to water and air pollution control, obliged to spread out, divided horizontally and vertically, paralyzed by anarchy, but more often—and now running the risk of being always—they are in the hands of pollution's natural allies. For only a country as intelligent as our may be so bold as to allow itself the paradox of entrusting, as far as pollution is concerned, protection to the producers and prevention to the promoters. Is it possible that ministeries engaged in production find themselves as it is the case, entrusted with fighting off their own pollution?"

The FOS case is a good example.

"Public powers are fighting, what might be called a delayed-action leading to nowhere because they are faced by too powerful a party, and also, it must be added, a kind of employment blackmail constantly prevails."

Is the process of change under way? It would be most desirable, but recent examples prompt discretion. In respect of pollution, let us choose the example of FOS, and as for respecting townplanning guide-lines, we'll find out what happened to the overall planning proposals adopted for the Paris area.

FOS

"I should like to talk to you about a leading problem: it concerns environment policy. I consider the FOS area in a broad sence, reaching from Marseille to the Camargue, as a test for the French environment policy."

These words were spoken by Mr Jérôme Monob, government delegate for country-planning and local action, at an information meeting on October 8th 1971. A similar statement was made on 28 january before a meeting of foreign journalists:

"I am convinced that the FOS area's planning, as far as environment is concerned will be a success . . . The greatest care has been taken in every field. The steel industry will be the cleanest in Europe. Non-polluting central heating systems will be binding for all inhabitants. And as far as the power plant is concerned, the aim is to use only non-sulphuric fuel."

This statement requires analysis. Non polluting central heating systems are binding, whereas for the power houses, the aim is to use sulphurless fuel. As for the steel industry, it will be the cleanest in Europe. The gradation is significant in itself. Lets have a closer look.

What is meant by a clean steel industry? If this means an industry which doesn't throw up too much toxic by-products a steel industry is certainly clean. On the other hand, it throws up large quantities of non-toxic dust. Filtering equipment exists, and on 25 November 1971 the restricted Council, at the request of Mr Poujade, took measures concerning "specific conditions, such as the activation of the most modern anti-pollution methods of control and the pledge to introduce the newest devices which technology has developed in this field." These decisions are to be compulsory for industrial firms.

The financing of the steel works at FOS has met with unexpected difficulties however, having been promoted, it must forge ahead. It appears that these financial difficulties have led the board of directors of SOLMER to cut down expenses by postponing the introduction of anti-pollution devices.

Steel making also results in the production of large quantities of slag and dross: where will these be dumped? In the countryside? It also involves the use of huge quantities of water which is subsequently wasted, polluted and heated. According to biologists, if water reaches 33°C all life disappears. What ground-rules have FOS engineers to work on? What limits were they given?

The steel works will, by 1974, use daily close to 5 000 tons of limestone quarried nearby. Transportation by water would be possible, providing the existing canals are brought up to modern standards. However, reluctance to finance these works is being shown by the Government, and a decision (as yet theoretical, since they aren't working) of using the existing road has been made. This means 200 trucks of 25 tons each, passing daily through Martigues with the noise and the dust which this entails added to the fact, that in Martigues, is the greatest road bottle-neck in the whole Department.

Let us consider the power-plant, the main cause of the air pollution.

The estimate of specialists is that by 1975, 800 to 900 tons of sulphur will be thrown up into the air by the steam generating stations and this amount is to be compared with the 700 tons which are at present being blown up daily in the Paris area. One part only of the power-houses will be set up in 1975. Later

on, dust and smoke from both the steel works and the power plant will mix the hydrocarbons generated by the oil refineries and the result could well be a Los Angeles type of "smog".

When the first surveys were made, the issue at stake was: the prevailing north-south "mistral" wind, which it was expected would blow everything off towards the open sea. Since, recent meteorological observations have stressed the importance of sea breezes, carried by easterly or westerly winds the pollutions could reach inhabited areas or natural parks like "La Crau" or "La Camargue".

The concern of the population is therefore understandable. A possible solution would be to build very high smoke-stacks, but this is impossible, because they would stand in the immediate zone of approach of the future airport.

All this enables one to understand more easily the government's decision on 25 November 1971:

"To fight atmospheric pollution, the quality of the air will have to be continuously controlled by a network of automatic devices. This network will allow instant detection of pollution outbursts due to bad weather conditions. Drastic measures of control will then be applied."

If we cast an objective look upon this state of affairs, whilst recognising the government's action aimed at reducing all kinds of damage due to local industrialization, we must temper the optimism of governmental statements. The will to fight pollution to the end, to see the enforcement of the "very strict conditions" imposed, in theory, upon the firms could be proven in two ways:

(i) On the one hand by making public the SCHNEEL report mentioned by Mr Laporte, local civil governor, when he was interviewed by the magazine "L'Express" (local edition, February 1972). It is relevant to link this report being put in the hands of the government and the decision to set up a network of automatic devices to detect and warn of incoming pollution. This will "enable us to apply drastic measures of control" on polluting factories and even, in some cases bring them to a temporary halt. Large bodies of people aware of the risks could control the setting in motion of the foreseen measures.

(ii) On the other hand by changing completely the supervising system. This is where we stand presently at FOS:
  (a) It is the naval department of the Civil Department of Bridges and High-ways of the "Bouches-du-Rhône", which must approve the treating of liquid cast-offs in sea water. The Head of the naval department, is at the same time Director of the Autonomous Harbour, and promoter of the industrial zone; his position is rather delicate.

(b) The mining department assumes the same responsibilities for the other cast-offs. In this department are found men with the same social and school background as the engineers and the leaders of the steel industry. These men are government officials from the Ministry of Industry the ministry responsible for the nation's industrial promotion.
(c) The balance of numbers is greatly in favour of industrialists (three capable engineers at the disposal of the Mines service, for the whole department). Moreover, these officials are submitted to heavy pressure by the manufacturers of anti-pollution devices. From the new measures they recommend will depend the negotiations and eventually the important contracts, all the more important because this industry being new on the market monopolies are numerous. The products manufactured by each company are not diversified. Each enjoys a monopoly in its field.
(d) Once enacted, the measures must be made official. They will become so by a decree of the prefect. Now, the prefect enforces a government policy which gives the priority of priorities to industrialization. Moreover, unlike what takes place for large town-planning deals, there is no previous public enquiry. Measures decreed belong to administration affairs and are not made public. Recently, a township requested information about the measures decreed.
Manufacturers cried shame: "the matter becomes political."
(e) The decree made public (and not the specifications which go with it) its application must be supervized. The supervisors are the same people who enacted the measures. Their number hasn't been increased and their inspection tours, very few, always assured of a long previous notice. Most of the time, they amount to a meeting with the board of directors. To behave otherwise, would be considered as out of place.

By going deeper in the case of FOS, one learns a lot more (social segregation, delay in fitting out schools, etc.). Essentially, it stresses the government's major concern: successful industrial expansion, at all costs, including the known overlooking of environment.

The process is clear:
(i) on the one hand, the government helps to the hilt private business to peg out a new factory;
(ii) on the other hand, belatedly and under the pressure of public opinion, it takes measures to limit the pollution generated by the new factory.

The hierarchy in government concerns is obvious: first of all produce, in other words encourage capitalists to do their job, then far behind, palliate the most ranking drawbacks of that kind of production.

Planning out of the Paris area

The problems of pollution made of FOS an interesting case but it doesn't allow adequate appreciation of the consequences of factory location, namely employment and housing. The plan for the Paris area has been analysed to this end.

Whether Paris should be allowed to grow at the expense of the rest of the country has been under discussion for many years, since 1930. After the war of 1939/45, the debate was carried on. After much discussion overall guide lines to be used for the planning-out of the Paris area were produced in 1965.

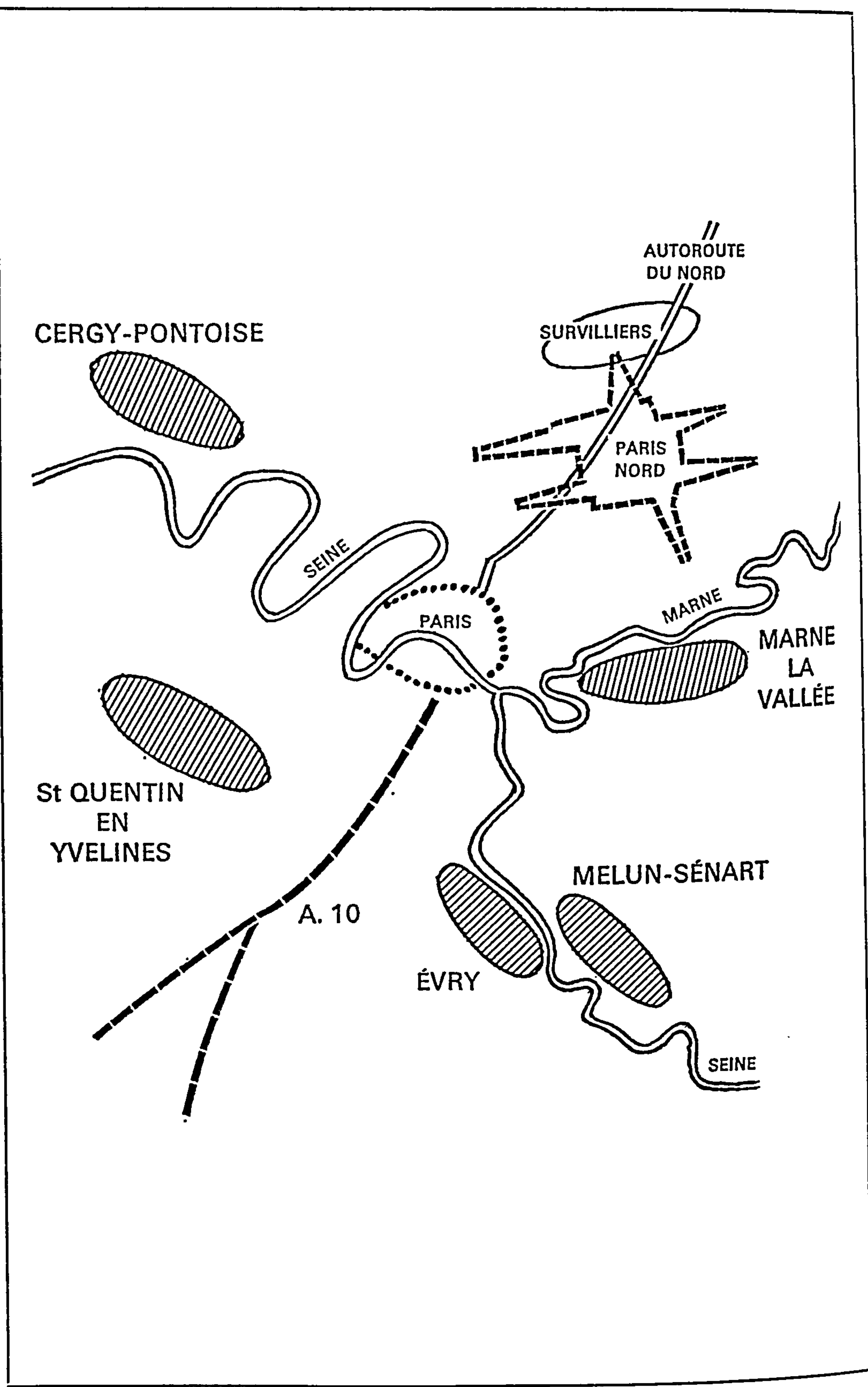
In essence it aimed at avoiding that the population of the Paris area (presently 9.6 million inhabitants) should increase to 16 or 17 million by the year 2 000. A nationwide policy was to be developed including the creation of 5 new cities located between 30 and 40 kms from Paris. These towns were to be located along two east-west built-up areas following the valleys of the Seine and the Marne. To avoid the daily commuting from home to work, factories were to be installed. At the same time, to offset the lack of balance between employment opportunities and housing east of Paris, new employments were to be created in that area. Where do we stand 6 years later?

The east-west development axis seems to be in jeopardy. One of the constraints already existed. The new airport of North Paris (located at Roissy en France) will provide between 80 000 and 100 000 new jobs. A new town (Survillers) will be built from scratch by private promoters.

Presently, 30 to 50 000 dwellings are foreseen. It is located in the airport disturbance area, the very one where the overall plan foresaw no building at all. Thus all the problems and disturbance caused by airport noise are deliberately overlooked.

The experience acquired by the residents neighbouring the other Parisian airport ORLY, is being wasted. It is true that medical care will be paid for by the community rather than the promoters. But today, it is common knowledge that the building of this town not included in the overall plan will hinder the development of the two nearest new towns, namely Marne la Vallée.

Another development, government inspired, will make the situation worse. A motorway (A 10) towards the south-west was to be laid out between 1975 and 1980, when the expansion of the new cities would have become sufficiently dynamic not to be affected by it. The government by turning to private contractors for the financing of the project, will speed up its realization. Among these contractors are real estate promoters, owners of broad expanses of land originally intended to remain as a part of a green belt. It is now common knowledge that real estate development will take place along that motorway, for no one doubts that the promoters will succeed notwithstanding the



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Hence, it is possible to foresee a north-south axis of development occurring, which will affect the overall plan and return to a ring pattern of development for the area south of Paris what everybody wanted to avoid.

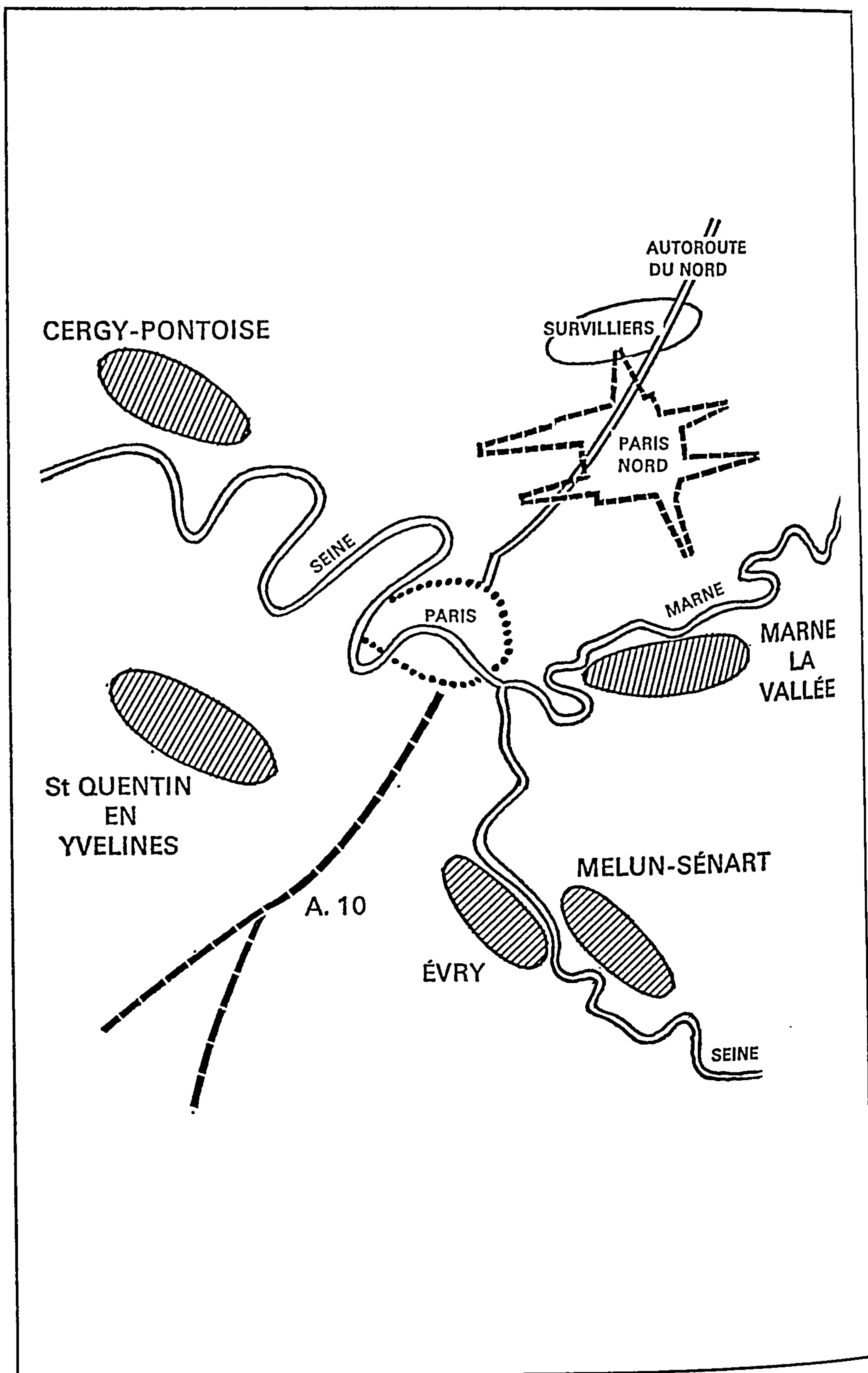
The built up area near the motorway A 10 will spread like an oil stain and will tend to become a link between the new city of St Quentin en Yvelines and Evry. The whole strategy of the master plan is at stake. Moreover, as early as 1969, an anti master plan was already being mentioned with regards to the policy of the Ministry for the Environment.

Another unresolved so far, or at least delayed problem consists in promoting new employments east of Paris The original decision aimed at increasing the office space availability in the "Defense" area so as to attract the head offices of the important companies located west of Paris. This initially implied creating 100 000 new jobs. However the need to maximise profits out of the "Defense" deal has stalled, for a while, the creation of new job opportunities east of Paris. The daily commuting of the east suburb's inhabitants has increased by 40 % as most are compelled to work on the west side of Paris at "la Défense."

The future of the new city of Cergy/Pontoise, is also compromised. Presently it runs the risk of becoming a dormitory town. The government's decision of laying down a line of "Aero-train" between Cergy and "la Défense" throws light upon this situation.

These examples and the many others available, cast serious doubts as far as the trade unions are concerned on the usefulness and efficiency of the rules and regulations applied to location of new factories. The French experiment gives clear indication of the prevailing interests of real estate promoters, and the strategy of large firms. The governmental powers held by groups politically linked to the same interests and having the same notions on industrial development, cannot and do not stand in the way.

But bowing to public opinion's judgement and under its pressure, it cannot afford to let things get completely out of hand. The vested interests of capital is to prevent the blowing up of the system. But captives of their private interests, they are in contradiction with their own class interest and therefore need government regulations to keep the system in balance. Thus from time to time the government tries to promote town planning, but if the pressure from interests that back it becomes too heavy it will yield unless workers rebel against their conditions of life and take action.


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These examples stress the system's weak points: Practice does not square statements of intention, and the political power attempts to shirk respons ties. Here is a relevant text: The Minister of Environment, on June 4th 1 answering questions of members of Parliament, confirmed the existenc important regulations to control town-planning and the conservation of na but had to admit:

"It is nonetheless true that it didn't prevent excessive town-planning, anarchic and aesthetically open to criticism ... It is mainly the extensive regard of legislation which seems to be at the basis of the most grie damage done to the countryside. Even in the case of areas listed in the gov ment inventory, the arguments of the officials in charge—I shall give yo a moment an indication of the means at their disposal—and the advic local planning commissions usually carries little weight when faced with pressure of urbanization."

The very Government responsible for the derogations seems to be powe "faced by pressures of urbanization."

As if these derogations to the rules were not the government's own decisi

(a) The planning of the "Défense" district is led by a public concern in w the government has the lion's share: the important increase of of space in infringement of the planning scheme is accordingly, a gov ment decision;
(b) the decision to lay out an aero-train between "la Défense" and Ce was taken at a cabinet meeting;
(c) the laying out of the Paris/Poitiers motorway depended on the gov ment as well.

Examples could be multiplied, as several thousand derogations to the occurred. That's the truth that lies behind the speeches. Then what's the us regulation, if it is meant to remain unapplied, for want of political will ba by a forces balance favourable to carrying on these controls?

Useful proposals towards improving human environment, must therefore towards bringing about the conditions needed for this balance of forces. forces and the interests of those who stimulated this world campaign for preservation of nature, must be acknowledged.

This is the purpose of the following part.

Why this campaign?

To analyse the problem industry faces with pollution control, logically br

this question to one's mind: why this campaign? It is unusual for governments to take the initiative of imposing new charges upon business concerns. The whole history of the labour movement proves that hard struggles are needed for workers to be considered as human beings, to have social legislation voted, and that its application needs more struggles. And suddenly governments launch themselves in a world campaign to control pollution and preserve the quality of life. Why then this unusual behaviour?

Concerning the USA, it is easy to understand, for they were the first to rouse world opinion. This enables the current European campaign to be partly a preventive action, but the process and the reasons are the same.

The problem of pollution and nuisance is an old one: Mumford's book written in 1934, and mentioned earlier in this report, refers already to previous writings on the subject. In France, it was B. de Jouvenel who in 1957, published articles on environment, and on the integration of the costs of nuisances in economic budgets. Many more examples could be given. If until then, no one took notice of those warnings, if the costs were being integrated, it is not for want of knowledge, but was imposed by the economic system itself. Industrial development had itself to be hindered, for a new behaviour to emerge.

Thus in Pittsburgh, the conflict which started in 1939, may well be seen as a struggle by the population against the companies, but it was especially in 1945, when 40 industrial concerns decided to leave the town on account of the smoke, the fog and continuous danger resulting from floods and contaminated waters, that the measures adopted were enforced.

In France, the risk of water shortage, about 1965/67, brought out the pollution problem. This risk compromised the possibilities of industrial development as industry uses close to 80% of total consumption. The Torrey Canyon disaster, the "black tide", focused attention on sea pollution, but also on tourism which could go into decline if beaches too were polluted. A survey made by a *consumers organization*[1] *pointed out the large proportion of beaches where* swimmers health was gravely endangered Presently, the same is true for numerous rivers and streams. To a lesser degree, we were therefore faced by a process similar to that in the USA

But this state of affairs is not enough to explain the present campaign. Despite their consequences for humans, pollution and the destruction of the natural environment were long neglected. For them to become a concern of government and provoke a change of attitude among some sections of the governing classes, the calling into question of the type of development by young people, by scientists and members of universities was necessary. This finding added to that of the workers modified the balance of forces and made a change of attitude necessary.

[1] Federal Consumers union *Que choisir* nr 42, April 1970

This evolution is very well described in an article in the employers magazine "The new Factory (l'Usine Nouvelle)" (monthly of October 1970) entitled "Pollutions":

The American business concern wishing to win its case before public opinion, explains how polluting companies have understood, that whatever the quality of their product, their "brand image", important part of the pay-off, will come out besmirched". One switches, from anxiety to optimism: "The anti-pollution equipment market is huge, and so to speak, still virgin."

The operation therefore aims not only at profit-making; it is also a political bargain and the same article explains it unambiguously by setting in the context President Nixon's speech of July 1970.

Another employer's magazine "Enterprise", writes in its issue of June 26, 1971:

"To combat nuisances, has become of late a government business. This awakening to the consciousness of the political dimension of the problem came fast in all western countries. It is moreover, remarkable in scale, spontaneous and inclusive. Coming from the USA, it spread to all European countries, thanks to a far-flung international information campaign, to which accidental, but spectacular disasters, or unpopular industrial decisions gave an unprecedented echo.
The Nature Protection Year, organized in 1970 under the aegis of the Council of Europe, was used as a background for various public demonstrations, to sensitize public opinion and for steps taken more or less in a rush by the States to give the impression that they were doing "something".

Total expenditure by industries to combat air and water pollution is estimated at 500 to 600 million francs yearly. The cost will bear down very heavily on certain polluting industrial sectors such as iron and steel, cement factories, refineries, paper pulp factories, etc. . .). It will mean for them an added investment cost of 10%.

Someone must pay. And to make sure there is always a profit, industry cannot be the payer, the bill would run up to high. Therefore the public will foot the bill, either as consumers or as taxpayers, if the State subsidizes.

Environment is now subject to a dual utilization:
(i) economic exploitation because it provides new markets;
(ii) ideologic exploitation because it is indispensable to disguise true responsibilities and attempt to turn a social problem into one of individual morality: by bringing out in everyone a guilty feeling, induce them to pay the high cost of purified air and water and of less noise.

One of the goals of the campaign on the topic "Producers or simply consumers we are all polluters", is to pave the way not only towards payment of the bill but furthermore to be backed by a mystified public opinion to keep the present dynamics on the go. On introducing the budget estimates of his Ministry, the French Minister of Environment followed that line:

"Everyone pollutes, it is an obvious and determining fact from which I will draw two inferences. First, that to combat pollution is expensive, everyone's share must match their pollution."

But industries did not seem to understand! ... The calls to "environmental ethics" being obviously insufficient for them to run the risk of increasing their cost prices, more concrete instructions were given. At the start of the French campaign, in June 1970, the newspaper "Le Monde" recalling a recent statement of the Minister of Agriculture, according to which "the protection of nature must be paying", hinted that in the USA this was already the case.

The article stressed how consumers were finally convinced that eliminating various kinds of pollution was a necessary service.

A few weeks later, "L'Expansion" devoted a study called: "Gold in waste", to the problem. It is enough to quote the commentary introducing the article in the summary.

"Americans have begun to roll up their sleeves to devote all their energies at a task that will largely overtake landing on the moon. The large companies are already aware of the cost, but they have grasped as well that here might also be the fabulous source of new profits."

And the introduction to the article:

"The American economy is on the way towards a new joint endeavour. This time it is neither the matter of winning a war, nor landing on the moon, but of achieving human purposes. Who would not agree? Clean air, clean water, clean cities, is everyone's concern."

"The French Government in turn has set about it: On June 10 it drew up a programme and established a "High Committee" an initiative as yet symbolic. Serious business will start when investment and new markets are at stake. In the USA this is already the case. "Media" have created the obsession and the obsession has created business."

It would be too long to mention all that has been published on this theme in the economic and financial press.

But precise details emerged as the days went by. If the daily and weekly press

keep on talking about threatening dangers hanging over humanity's future, the other papers point to a different side of the question:

Foreseeable profits, the necessity to produce results fast in order not to abandon this market to foreign competitors.

In June 1971, talking to industrialists, the Minister of Environment, very firm about the necessity of doing one's utmost to stop polluting, enhanced another side of the current campaign:

"It is quite clear that every environment policy must take account of the balance of forces and the economical relationship existing between nations. To blind ourselves to the fact that the great battle undertaken to protect environment is not only a battle of ideas, but a great economical and commercial struggle, would be incredibly naive."

That is what casts light upon the obstacles to international agreement on fighting pollution: the essential is to avoid losing the markets.

Knowing exactly how things stand, it is now possible to deal with the introduction of the trade unions into this action for a better human environment.

Trade union's propositions

Having presented a trade-union approach to the interface between the preservation of environment, industrial expansion and the location of factories, here are a few suggestions put forward in the light of our permanent preoccupation, namely to provide a positive answer to each problem, while at the same time assuring that the workers remain masters of their lot.

In the first place I must stress the importance given by trade unionists to the human environment in all its aspects which means refusing to limit the problem to the protection of nature alone. Nor is this a problem for the individual to be solved by teaching children at an early age to respect nature. Nor would it be sufficient to be a bit more careful while pursuing the same kind of industrial expansion or by "being at peace with Nature." No! the environment problem is not an ethical problem, it is a social and a political problem. What is at stake, is industrial expansion itself. This is what is being recognized by more and more people.

It is in addition the conclusion of a report presented by Mr Barry Commoner, Director of the biology center at the University of St Louis (Missouri), to the Stockholm conference on the protection, and conservation of Nature (1/4 July 1971). He is of the opinion that solutions to the environmental crisis will

require a radical reorientation of production techniques, and a massive re-building of production facilities.

It is also the conclusion of a Financial Times editorialist who wrote on 6th April 1971:

"The only possible way, is to redefine anew what our society expects of life. *It is the utter confusion about our goals, which is responsible for so many of* our fellow-citizens being all at sea and virtually in the throes of anarchy."

"We need a new goal. The old one—more industrial growth of the type known up to now—is already rejected by too many people. But what instead? More free time, more help to the under-developed countries, a better standard of life for our own poor; frontal attack on the wretchedness of our cities, on the motorcar which, on a large scale, will have to be banned; make atonements for the ravages incurred by our landscapes, all that is wishful thinking... If an authentic revolution was offered to us—a revolution raising the quality of life rather than the gross national income—the building-up of the new society would probably be costly. Meanwhile, if the masses were conscious of their being in search of goals which they themselves have set, they would show an eagerness for work that not one of the doubtful fiscal incentives will ever get out of them."

This proves, that the solution is not what is heard too often: moving faster in the same direction and using the surplus thus freed to combat pollution. This conclusion is also that one of the CESL/OE.CMT meeting held in July 1971 in Luxembourg. We quote:

"(6) It is true that the goals of production and consumption have enabled industrial societies to relatively overcome destitution and hunger and that consumer goods produced by man are essential, to a certain extent, in securing its welfare.
But consumption also serves artificial needs magnified by publicity and jeopardizing man's true satisfactions.

(7) It only results in a continuous pressure for reserving resources for the most profitable sectors, whereas basic human needs are not met; particularly because of the lack of appropriate collective infrastructure.

(8) Therefore it is the very pattern of industrial development which is at stake; its sequels are increased by capitalist and neo-capitalist systems for which only the maximum profit for business, derived from the exploitation of men and nature, is of importance."

But here and now, different measures could reduce the baneful results of capitalist patterns of industrial development.

Our proposals

Our proposals are therefore geared to this struggle. They are designed to give the maximum power at once to the peoples concerned, to make their citizens increasingly aware of the importance of the environment, increasingly active campaigners concerning this essential aspect of social life. This active attitude, the very foundation of democracy, is the prerequisite for the attainment of a balance of forces favourable to a new environmental policy.

Information

First of all it is necessary to make workers and the whole citizen body aware of the manipulation to which they are subjected—a conscious or unconscious manipulation—for those who hold the reins of power dispense only information of a rational and economic character reflecting their scale of values.

Information on this subject must be permanent, objective and complete. It must be permanent because if it is merely occasional and circumstantial, only furnished on a particular occasion, then certain aspects will inevitably be passed over in silence; it will not be complete and objective.

For this reason it must come from a variety of sources, and the parties concerned—the trade unions and political and social organizations—must have complete freedom to express their points of view.

The conference should therefore pass a resolution emphasizing the vital importance of permanent, objective and complete information on the human environment. The Communities can play a useful part in the dissemination of this information. This is extremely important, for while the mass media have played an essential part in mobilizing public opinion, these same people may find that a mobilized public opinion has consequences contrary to their interests and may decide to stifle it. They have the means, for it is they who control the mass media. They must not be allowed to use them for this purpose.

Animating the public in this matter in a basic requirement, in order that they may cease to allow others to do their thinking for them, thus dominating them and imposing their conception of society—with its dramatic consequences—upon them.

For the same reasons, when new factories liable to cause pollution are being built, studies should be made and published of their possible consequences for the environment. The people affected would then be able to inform themselves as to the measures taken to avoid pollution, to give effective support to their representatives and to exercise their own control over their immediate environment.

Similar provisions should be adopted concerning the siting of factories, which should be considered from the town planning and conservation standpoints, with due regard to their distance from residential areas in order to reduce commuting time.

Knowledge of the human consequences of urban nuisances will lead to an awareness of the heed to preserve the possibility of social relationships and contacts in cities, and particularly in city centres; for this purpose an extensive public transport network should be maintained, thus reducing the use of private cars

These town planning regulations already exist in France, but they do not have democratic backing, and in addition the local authorities are too weak to compel the industrial and financial powers to respect them. Moreover, these authorities are themselves often in the hands of notabilities sharing the same interests and the same outlook as these powers who manipulate the state.

Changes are possible if the general public, the whole citizen body, is in a position to give a considered opinion based on a constant and complete flow of information before the authorities take a definitive decision. In the new towns, representative organizations would pass this opinion in place of the citizen body. It will then be possible to impose conservationist measures on planners and real estate developers.

Only public opinion can ensure that these plans are respected by all concerned. The power of local authorities, from the municipality to the region, would be strengthened by these provisions, and this is essential, because only decentralised control by the people affected can put an end to the present practices. This would also lead to improved knowledge of soil mechanics, which is indispensable for efficient planning of space.

Education

In order to speed the improvement of the environment it would be advisable to initiate environmental training and to begin very early, the emphasis being placed on the extent and importance of the effect of the environment on the development of each individual personality. To limit this training to the protection of nature is to continue the conditioning of children and students and to deceive those of both sexes who have not had the opportunity to study this question deeply. It must be demonstrated that economic choices are not neutral, that they are made in terms of an ideology and result from a relationship of forces.

In the technical professions, it is necessary to inculcate the obligation to provide factories with anti-pollution devices at the construction stage

Training in the professions directly linked with town planning must include

practical work, particularly studies, together with city dwellers, on recently constructed complexes, their effects on the inhabitants's lives, and the background which has been created for them. For persons engaged in these professions the knowledge of criticisms is essential in order to enable them later to devise methods of work permitting the collective creation of a high quality environment, to teach them not merely to think and construct for others but to accept the questioning of their theoretical knowledge by those who will later have to live in the environment they have created.

Immediate measures

As regards pollution by commercial firms, it is not enough to fix a threshold; it is essential to lay down a very strict rule. During a debate in the French Economic and Social Council, the CFDT demanded that "authorizations for new premises, for the manufacture of new products and for the operation of new installations in general should be granted only if they are not sources of nuisances and pollution." This proposal was rejected.

The Conference might adopt this proposal, for it would give public authorities the power to act. It would compel firms to include anti-pollution measures at the design stage. This would incidentally be less expensive than the internal or external modifications required once the factory is in operation.

In the same way, if a new product gives rise to waste, arrangements for its destruction must be envisaged at the moment of the decision to produce is taken.

A considerable extension of supervisory powers and a change in inspection methods are also essential. Sources of pollution must be open to inspection at any moment by representatives of the local authority, without notice and without the polluter's permission, even if this entailed calling into question the concept of private ownership of the means of production.

Urgent action is called for in towns, where air pollution, noise and traffic jams are making life increasingly difficult. Measures are beginning to be taken with a view to halting the deterioration of public transport and to limiting the use of the private car in the centre of some towns. But these measures are insufficient, and those relating to the use of cars often penalize the less well-off users and are in point of fact discriminatory. Action must therefore have the prior aim of developing public transport and reducing its cost, with the ultimate aim of free transport. This will lead to a considerable reduction in the use of private cars.

Who shall pay?

The question of who shall pay for anti-pollution measures must receive a clear

reply. Initially all these costs must be included in the cost price of products; it can then be seen whether part of the additional cost resulting from these measures should be borne by the public as a whole. The decision must depend on the social usefulness of the product.

If the product is a gadget, the consumer must bear the whole cost of anti-pollution measures, for there is no reason why the public should bear any part of the cost of an article which is not of vital importance. If, on the other hand, the product in question is necessary for normal life (this notion being relative to the level of development of the society and the distribution of income), then the public must bear a share of the cost of such measures to be determined in each case.

Building the future by democratic action

Let me finally indicate why we have not made any forecasts concerning the necessary trend of industrial development, the need for changes in our approach to town planning and the allocation of funds. We have an opinion on these matters, and as the responsible trade union organization will give them at the right moment in the debates in order to inform workers and public opinion.

But we do not wish to predetermine choices which in the last analysis must be made by the people themselves. They will manifest these choices in the course of successive campaigns by which they will bring about the necessary changes and create their own environment.

Active citizens who change a given situation in accordance with their real needs and organize themselves in order to achieve the collective strength necessary to attain their goal—such citizens are an essential factors in a democracy.

The struggle for a better environment will therefore call for action on the following models:

(1) The campaign in the Lyons region to ensure that a refinery is built not at the most profitable spot, but where it will do least harm to the quality of life in the area.
(2) The campaign in the Saint-Etienne region to ensure the implementation of the regulations governing the installation of a thermal power station (the directors of the company having refused to improve the present dust-removal devices, which have become inadequate).
(3) The campaign in the Paris area, which has been in progress now for two years concerning transport conditions, with the object of compelling the government to speed up the planned changes.

Many other campaigns could be mentioned. They are becoming increasingly

numerous, particularly those directed against the building of nuclear power plants (though that is not essential to this report). Present trade union experience confirms lessons of the past: these struggles are indispensable, for without the persistent thrust of public opinion, without pressure from the workers and struggle at the seats of power, laws and regulations on the most important questions will never be drafted and passed, or if they are they will not be implemented. The recent statements of Mr Ralph Nader's study group show that a similar situation exists in the USA, despite a massive mobilization of public opinion.

Conclusion

Circumstances have not allowed a European approach of the subject of this report nor an analysis of the forces acting at that level. But with the present autonomy of Europe's political powers this would not be possible. Under present circumstances we can only make an analysis country by country.

Nevertheless, by analysing the true practices of the social forces of France undertaken for creating a better environment, and starting from a situation which can be more easily described, comparison with the practices of other countries must be made. It will facilitate a fruitful debate, an exchange of information and it will offer the possibility of activating international action by all those willing to really tackle the causes of the present situation.

Based on conscious actions by the populations concerned, such action will not curtail freedom of trade. On the contrary, it will favour its development, because the fight will be conducted, everywhere, against pollution and nuisances, the dilapidation of cities in order to realize a human environment which will enhance the development of everybody's personality.

Some will probably wonder about the ability for a liberal, economic and government system to submit to the proposals made in this report. It is a good question. Workers will struggle to better their life, their working conditions and to better their environment. They will judge the results of the struggle. As for the ability of capitalistic government systems to set as their main objective the development of a society made for human beings: the future will tell!

INDUSTRIAL DEVELOPMENT, COLLECTIVE REQUIREMENTS AND LIVING CONDITIONS(*)

H. JÜRGENSEN

I—STATEMENT OF THE PROBLEM

The controversy that has suddenly flared up concerning the protection and amelioration of the environment, and to a growing extent environmental planning, has triggered off proliferation of opinions. Whereas according to one view the problem of the environment is virtually irrelevant, there is no lack of voices which take it as the context for gloomy prophecies and for which environmental protection becomes a fight against the destruction by man of the very basis of his existence. Yet to go to either extreme of it, of brushing aside the danger or of uttering Cassandra-like cries of woe, is both scientifically unjustified and unhelpful as regards finding a political solution. A scientific approach to the problem demands the sober rigour of theoretical analysis and must not lapse into unverified or naive speculation.

In the environmental debate it has frequently been demanded that entrepreneurs should be made to pay for pollution and damage on a simple principle of liability, not seldom with the political intention of imposing the maximum obligations on the capitalistic structure of production with a view to abolishing private power of control over the use of production factors. But the problems involved in attributing liability for environmental damage can only contribute to clarification if it is acknowledged that in a developed economy pollution through production or consumption is the rule and not an exception. Therefore it is not primarily a matter of imputation, but one of devising methods and measures that will serve to contain the pollution and eliminate or compensate for the damage it causes.

Although the external effects and the ensuing social costs have been recognized as facts since the earliest beginnings of national accounting, the form and scale of the phenomenon have undoubtedly altered its relevance to economic policy (Ref. 1).

For practical considerations on matters of environmental protection, the social costs can be narrowed down to all the costs incurred damage suffered by third parties, households, undertakings or society as a whole as a result of external effects during the utilization of natural resources or natural productive forces

(*) Translated from the French

of the environment as a medium for the absorption of environmental pollution (Ref. 2). There are various reasons why these social costs have assumed decisive significance in recent times (Ref. 3): the per capita consumption of raw materials, energy and finished goods has steadily risen in the course of economic growth. The geographical concentration of industry and population imposes increased regional strains on the environment. The threshold values for the natural capacity of the environment to absorp deleterious substances have in some cases been exceeded. And technical progress, especially in the chemical industry, has led to new technologies and to new products which, although they have substantially reduced the production costs in the private sector, are in some cases not readily degradable.

Economically speaking, the consequences of environmental pollution can be assessed through the external effects it causes and the ensuing social costs. Analysis of the environmental problem can thus be related to the concept and implications of social costs.

Earlier treatments of the problem of social costs were adapted to micro-economic conditions. Not until the growing importance of the social burden due to the side-effects of production and consumption became apparent was there a shift in the handling of the problem towards macro-economic relations, as a result of which production and consumption were seen more clearly not only as regards their incidence on private sectors of the economy but also in their overall effects.

With the adoption of the macro-economic approach the problem posed by social costs underwent a transformation. Whereas from the micro-economic viewpoint it was a matter of taking measures to achieve a static optimum allocation, in the consideration of the evident connection between environmental problems and economic growth, it is now the dynamic aspects that assume greater prominence and call for an evaluation of overall economic growth possibilities from fresh standpoints. Economic growth must be viewed against the environmental demands it makes, and the quality of the environment must be accorded the same priority as the classical aims of economic policy.

The growth prospects of the Western European industrial nations will in future, as in the past, depend primarily on the contribution of industry as the mainspring of expansion. The picture presented, e.g. in the United States, by the individual sectors of the economy in their contribution to growth of the GNP, with industry taking a considerably smaller share, owing to the level of income achieved, than in the EEC countries, and one which has remained static in recent years, is unlikely to be reproduced here, at any rate during the 1970s, and is even undesirable in relation to particular growth targets. On the other hand, industry has to be blamed for a more substantial proportion of the environmental pollution observed, and one that is increasing especially in view of the relations between industry and traffic.

A great deal of the pollution load caused by traffic stems from the increase in industrial transport that has accompanied industrial growth, and the problem is being aggravated more and more by the ever-growing traffic activities of private households as a result of rising incomes.

In the discussions about the connection between economic growth and the environmental situation, it has frequently been opined that if we are to avoid a collision course between increasing demands on the environment and the shrinking capacity of nature it is imperative that we change our ideas, our moral standards and our statutory requirements relating to growth.

The historical development of environmental stresses and their now perceptible scale make it abundantly clear that the premise that economic growth and progress are fundamentally positive categories, will have to be amended in the light of the consideration of their side-effects, which have hitherto been largely ignored However, an environmental policy which sees in the occurrence of undesirable side-effects and the cost of dealing with them the justification for renouncing growth of any kind, runs the risk of leaving the advantages of expanded economies unexploited in the course of a general struggle against growth. But this is inconsistent with the concept of market economy. If the coordinating principle of competition, which is the primary characteristic thereof, is understood as a way of achieving social, economic and technical progress with a minimum of obstruction, then its justification is a constantly expanding production.

Consequently, if an environmental policy is based on the renunciation of economic growth it reveals an incorrect appraisal of the substitution mechanisms of a market economy insofar as it denies the effectiveness of competition. But it would then be inadmissible to lay responsibility for the environmental problem at the door of the market economy so long as the latter has not been called upon to solve it. Unsatisfactory results are not in fact due to a failure of the market but must be ascribed to an economic policy which does not lay down adequate guidelines. To this extent the solution to the social costs problem lies in the creation of new production and consumption conditions which take account of the environment as a production factor, and therefore as a cost factor, in the process of market economy optimization and will have to be based on changes in the structure of economic activities, in the production level, in technological innovation and in the economic re-use of activity-induced residues.

II—EXISTING AND POTENTIAL MEASURES FOR THE PROTECTION OF THE ENVIRONMENT WITH SPECIAL CONSEQUENCES TO INDUSTRY

As environmental problems become more acute with the passage of time, the social costs will steadily rise. In the course of ever greater industrial growth

the environment's capacity to reduce and break down the waste products and effluents caused by production and consumption is to a large extent exhausted in areas of industrial concentration so far as existing techniques are concerned. Beside the problem of supplying society with the goods it needs, we now face that of waste disposal.

If waste emission be regarded as the necessary consequence of any process of supply, it becomes clear that the use of nature for the disposal of environmental pollution is to be seen economically as an unremunerated factor input. Air, water and raw materials are thus resources not only in that they are utilized as an input in production, but also in that they serve as a receptacle for environmental pollution. Since such a use of natural resources does not form part of the market process of valorization, no price is assigned to it either. So long as the environment could be regarded as a free good because the self-cleansing and regeneration capacity was available in adequate measure, there was no reason why this should cause any distortion of the accounting context of a market economy. But if in the course of industrial growth the quality of the environment has become a scarce good, and therefore an economic variable, the consequences are distortions of the price structure and the misdirection of resources, so long as its use is not remunerated. Uses of the environment in production and consumption whose economic repercussion is represented by the social costs occasioned are therefore to be integrated in the cost calculation of the private economy by means of price indicators.

A—Objectives of environmental policy

The West German Government defines environmental policy as "the whole set of measures necessary to secure for mankind the type of environment he needs for his health and a decent way of existence, to protect soil, air and water and the vegetable and animal kingdoms against deleterious influences and to eliminate damage and impairment due to human intervention" (Ref. 4).

According to this, the yardstick for environmental policy is above all basic social values such as health and a decent existence for the citizen. Even though any translation of environmental policy aims into concrete terms must safeguard the relation to basic social values, the economic effects of environmental pollution on the production sector should certainly not be disregarded. From an economic standpoint, therefore, the definition is not adequate. Instead, the connection has to be established with the economic problems themselves.

If environmental protection is placed inside the magic polygon of economic policy aims, the conflict between economic growth and ecological quality becomes an urgent problem. Conflicts with other economic policy objectives, e.g. price stability or distribution standards, first arise in the further context of imputing the costs of environmental policy measures or charging for the damage caused by pollution. The economic aim takes the form of a demand for

appropriate growth accompanied by adequate quality of the environment, or for the improvement and safeguarding of environmental quality accompanied by a certain rate of growth. In addition, distortions of competition due to the social costs specific to the environment have to be eliminated or curbed in order to raise the efficiency of the economic process. As regards the growth target, this competition policy would assume an instrumental character.

B—Principles and strategies of measures for protection of the environment

The requirement of achieving a given growth of GNP, subject to a reduction in environmental deterioration, can only be met through the adoption of explicitly formulated minimum standards or limits of tolerance, separated according to the different causes of pollution. Such limits on the tolerability and admissibility of pollution, based on existing relationships and the status of an objectively assured technical know-how, determine the concrete form assumed by the subordinate condition of the growth target.

The necessary restriction of the validity of load capacity indices to the special circumstances prevailing in a given area calls for a regional differentiation as regards the formulation of the environmental policy aim. Since the ecological performance capability of an area, according to the different forms and sources of pollution, is made up of a great many individual threshold values for pollution, actual or potential, only the sum of all these values can represent the standard to be applied in the case of this area. If we thus draw up a schedule in which the threshold values reflect the relevant ecological data for the area, we obtain starting points for the application of economic decisions and the associated actions. For the decision-makers will be enabled to recognize local differences and ascertain which areas are capable of supporting heavier loads or are already overloaded and in what manner and to what extent. The degree of pollution reached so far can be taken into account, since it is expressed in the determination of threshold values. The latter actually is a matter of political decisions "that have to be manifestly justified in the light of the prevailing target priorities" (Ref. 5). Hence, also it cannot be undertaken by reference to standards of an economy and technology independent of the State which are not bound to take account of social requirements (Ref. 6).

Since the specific pollution load capacity of the areas is disregarded in decisions concerning the siting of enterprises, the existing spatial allocation is only an imperfect image of the optimum. The environmental policy measures which serve to correct the distortion due to such misorientations do increase economic efficiency but must by the same token serve the principle of equal competition at both the national and the Community level. Consequently, there must be a harmonization of measures. Regional differences in their application in administrative practice would provoke the very distortion of allocation that the measures were intended to remove. The particular nature of the problems is revealed above all on the international plane. In order to

exploit the specific allocation advantages of hitherto lightly industrialized, and therefore less polluted, areas inside the Community, harmonizing regulations for the Community are indispensable. The regulations relate on the one hand to the principles of environmental policy decision-making, and on the other hand to the application of the measures taken in accordance with such principles, namely the joint definition of exceptive clauses and the timely agreement of transition periods. Special problems arise in connection with the possible export of environmental pollution, e.g. the wind-borne transport of emissions into other States' territories or the pollution of watercourses which traverse several countries. What is needed here is the transfer of power from national authorities to Community organizations or supranational bodies yet to be set up.

The procedure for the application of all existing and potential measures can be classified according to strategies which embrace both temporal and spatial aspects. Time-oriented strategies are directed on the one hand towards new activities and are thus brought to bear in the case of new establishments, transfers and extensions of works, plant conversions and changes, new production processes and new products. Since the existing patterns of pollutant phenomena are not to be radically transformed from one day to the next for the purpose of protecting the environment, it is on the other hand necessary to strive towards a progressive improvement of the status quo.

In addition, certain kinds of pollution due to the siting of works, or certain social costs, are related to the degree of concentration in such a way that with increasing concentration both the benefits and the social costs rise, but beyond a certain point the growth rate of the latter outweighs the advantages of size and proximity, which are then transformed into disadvantages of cramping. The task of a space-oriented strategy in these cases is to curb trends towards concentration and to improve the quality of siting factors in those areas which, as regards their ecological capacity, are found to be capable of supporting a pollution burden: in other words, to promote de-concentration.

With the use of time- and space-determined strategies a sectoral influence would also be exerted insofar as the catalogue of environmental policy measures is sufficiently versatile to promote the occurrence of structure-modifying components as regards the relative expansion of productions involving a below-average degree of pollution.

For the imputing of social costs, the West German Government has formulated the fundamental principle of "making the polluter pay" (Ref. 7). Besides the favourable effect this has on allocation, it affords the advantage of satisfying the criterion of equality. But if, together with the abatement effects of environmental protection measures, compensatory effects to neutralise the adverse consequences to growth are also promoted, it becomes plain that the principle of making the polluter pay, while providing a basis, cannot be taken as a

general tenet for cost imputation or provision against environmental damage. The principle advocated as an economic policy solution is found to be too narrow if the limits laid down by the State for the behaviour of the private sector in relation to the public good are to be adhered to with reasonable employment of funds and if priorities are to be avoided in the resolution of conflicts of aims between objectives of equal importance. Whether, in a given environmental situation, preference should be accorded to economic levers or to behaviour control, is a matter to be decided after evaluation fom such standpoints as proportionality, acceptability to the parties affected and the overall economy and efficiency in the sense of environmental protection aims (Ref. 8). It cannot fundamentally be a matter of making the originator of social costs reduce his level of production while using the same technology, or of setting aside his siting decisions for lack of alternatives. To this extent the criteria for the choice of measures argue strongly in favour of a mixed system of direct behaviour controls and economic levers.

C—Contributions to the discussion of existing and conceivable measures for environmental protection

The existing and potential measures for protection of the environment cover a wide spectrum ranging from the establishment of legal and organisational standards for the formulation of long-term framework conditions for the economy, to a system of inducements and benefits for industrial activities.

The legal possibilities of overcoming environmental problems cannot be separated from the political possibilities, "for environmental law is, of course, not traditionally a subject of jurisprudence, but political action in legislative form, i e. an instrument of environmental policy (Ref. 9).

The existing legislation for protection of the environment in the West Germany of today has been built up essentially from trade laws and bye-laws. It recognizes the status of the offending party and the injured party, and accordingly always postulates the prior occurrence of an incident causing damage or injury or the supposedly real danger of damage or injury (Ref. 10). But the task of any future legislation on environmental protection must be to apply the rule of law to the favourable shaping of the environment and to the preventive control of damaging factors through the enactment of basic political decisions which are binding, the equitable distribution of environmental stresses and the ensuring of rational decision making processes.

Environmental legislation cannot be wholly indicative in character, i.e. take the form of an enabling act with reservation for ad-hoc controls and general guidelines, to the extent that it prescribes the attainment of certain standards by a given deadline (Ref. 11). For the sake of efficiency it must also be

mandatory in character, because in the longer term behaviour injurious to the environment cannot be answered by ad-hoc State action taken only after given limits have been exceeded, but must be combated from the outset (Ref. 12).

Furthermore, it is conceivable that enabling acts for the whole area of validity of environmental legislation will be passed and will thus constitute an overall concept. In particular areas of application these acts will, however, have to be supplemented by statutory provisions which take account of the specific geographical, geological, hydrological and economic features of the districts concerned, i.e. their special schedule of threshold values.

An effective environmental policy cannot dispense with the aid of science and technology. The problems that arise demand a thorough and progressive use of technological advances both as a growth factor and as a means of achieving environmental policy aims.

The determination of growth targets, in conjunction with the secondary requirement of pollution abatement, must add a new dimension to the concept of technical progress.

In the neo-classical theory of growth, technical progress has been used as a catch-all quantity to explain all kinds of increases in efficiency, so that its sole reference quantity is the growth of GNP. But in the calculation of GNP no account is taken of the social costs. Frequently, however, these are in turn the consequence of the new products and manufacturing processes designated as technical progress in the traditional theory. To this extent GNP is a distorting reference quantity for the concept of progress.

Moreover, the notion of technical progress that predominates in the neo-classical theory is not even sufficiently comprehensive as regards its explanatory content, since its concept is based on the content and fictions of the model of perfect competition. But this model ignores the existence of external effects. At all events the criticism must be restricted insofar as any attempt to take account of external effects in empirical growth analyses would overtax the capacity of the statistical machinery.

The furtherance of technical progress under a policy of growth accompanied by environmental policy aims must therefore be alone on the basis of a cost-benefit calculation, for which GNP does not constitute a reference quantity.

The resulting possibility of overcoming the implication of the qualitative constancy of the production factors labour and physical capital—on which the prevailing definition of technical progress is based—at the same time allows other quality aspects, especially the environmental innocuousness of production processes and products, to be taken into account in answering the question as to the effect of a technical innovation, in addition to the consideration of

qualitative changes in the production factors. Furthermore, the definitional separation of technical progress from its original reference quantity allows recourse to mechanisms which find expression in altered quantitative relations between the actual output and the undesirable by-products thrown up during its production, among which can be included the emissions.

The guiding of technical progress towards the goal of environmental relief calls for State support. Three types of action can be distinguished which aim at *the promotion of technical progress beneficial to the environment*, namely measures to raise the innovation potential (invention), measures to increase incentives to innovation and measures to remove or diminish impediments to innovation (Ref. 13).

Besides training and information activity, the promotion of R & D is part of the process of raising the innovation potential, and hence new inventions. The State is able to encourage R & D expenditure by means of special depreciation rates and investment grants. State action to create or improve incentives for innovations which relieve or benefit the environment is most effective where it affords a prospect of material success. It therefore includes the granting of proprietary rights in respect of the inventions concerned, tax concessions on income from these inventions and tax deductions in respect of expenditure on them. In future it would also be appropriate to provide initial aids for the establishment of new enterprises to carry through innovations. For the setting up of a special enterprise is a prerequisite for economic success in cases where an innovation is not incorporated in the strategy of the enterprise which gave it birth. Moreover, the possibilities for capital participation by small and medium sized firms can be more intensively exploited, smaller concerns can be given a greater share of research contracts awarded by the State, and losses and development costs can be allowed to be spread over several years for tax purposes. If statutory provision is made for certain innovative requirements, higher depreciation rates could be allowed for the corresponding activities. In addition, the State as a client for technical hardware is above all able to lay down innovative requirements, and thus give incentives, in the case of measuring instruments and processes for determining environmental stresses.

Since no private sector demand assesses the results of innovation projects beneficial to the environment, it is advisable for the State to participate in the manufacturer's development costs or offer financial inducements to the user, in order to remove obstacles to innovation. Likewise, funds for the promotion of original innovations could be made available in the form of, say, conditionally repayable grants to firms which wish to produce or apply for the first time a process or product deemed to be of importance to the national economy, but hesitate to take the necessary decision owing to the high risk involved (Ref. 14).

Since processes and appliances already exist which are capable of reducing or confining environmental damage, thought must be also given to encouraging their application. This can be done through tax incentives, special depreciation

allowances, discretionary valuations and open subsidies for investments made in the interests of environmental protection, as well as by harmonizing, augmenting and extending existing tax incentives and discarding the system of official arrangements as a condition for the granting of tax concessions for certain plant conversions or modifications.

In this connection it is advisable to lay down beforehand the time limit up to which such aids will remain available. Otherwise, although they would contribute to pollution abatement, they would continue to exist in the form of extraordinary charges on the State budget.

State backing in the form of innovation-promoting measures signifies a distinct break with the criterion of equal treatment, a criterion which is favourably assessed in the context of the principle of "making the polluter pay". Nevertheless, efficiency considerations and the urgency of the problems that arise dictate that the regulating device of selectively acting State aids should not be renounced.

The fact that the prospect of material results from the utilization of technological advances constitutes an effective incentive to innovation implies not only expectations of market success but also cost savings. The State can make use of this fact by imposing financial penalties on activities that are harmful to the environment, thereby ensuring that firms are in like manner persuaded to introduce innovations or changes which reduce costs and at the same time benefit the environment as is being done with regard to the lowering of labour or materials costs. The charges can relate to production, input, pollution or damage caused. The imposition of charges on products whose manufacture or use is damaging to the environment could have an adverse effect as regards the incentive to environmentally beneficial innovation.

So long as it is cheaper to reduce environmental stresses by using anti-pollution facilities than by limiting production, these charges would impede the installation of such facilities but would possibly curtail production (Ref. 15). On the assumption that a throttling of production is in many cases undesirable, conflicts with the aims of distribution policy will arise if the parties concerned are able to dodge the penalty by passing the costs on to the customer. Similar problems arise from the levying of charges on production factors whose utilization, in the existing state of production technique, gives rise to environmental stresses.

The imposition of charges for emissions or for the damage resulting therefrom stands in more direct relation to the causes which lead to financial burdens, and therefore affords a tangible inducement to changes designed to relieve the stresses. It would be necessary to introduce a charge that would take account not only of the desired allocation effects but also, and especially, of the principle of equal taxation. Since social costs of pollution are usually the result of multiple economic causal relationships, the pursuit of the principle of

equal taxation calls, among other things, for a uniform imputing and apportionment of the total additional costs among the individual polluters during all phases of the pollution process. Environmental damage is usually first visible in the form of emission effects due to the activities of the ultimate polluter, i.e. the last link in the economic chain of causation: thus, for example, pollution from motor vehicle exhausts is the direct result of the use of a product at the consumer stage, although the cause of the pollution can be traced right back to the production stages of equipment manufacture and fuel refining. The legislator's task in such cases must be to impute the total resulting burden in principle to the ultimate polluter but to impose on the intermediate links in the chain a pro rata fraction of the charge payable, so as to provide economic incentives to reduce the nuisance at the point which is most favourable from the standpoint of the economy as a whole.

By analogy with the existing value-added tax, application of the principle of "making the polluter pay" would at first suggest the concept of a multiple "damage-added tax" directed towards a proportional imputation and charging of the identifiable costs of pollution to the individual polluters at all stages. But such a concept must be ruled out as unworkable owing to the insolubility of the imputation problem and to the lack of certainty in some cases as to the fundamental damage relationships. Instead, there is the alternative of an emission levy which makes possible the taxation of pollutant production and which, taking account of efficiency considerations, should follow the principle of ensuring the internalization at minimum cost of given nuisances within a period of time. In cases where, for example, pollution by combustion products can be identified as fuel-specific, a fuel tax proportional to the content of the pollutant in question seems more appropriate in the context of a taxation system than a direct tax on pollution emission at the ultimate consumer stage. This applies, for example, to sulphur dioxide emissions which exhibit an unequivocal causal relationship to the sulphur content of the fuel. Here, insofar as fuel desulphurization, rather than flue-gas desulphurization, is the cheapest alternative way of obviating the nuisance, the taxation of undesirable fuel properties would have favourable allocation effects by offering greater inducements to practice fuel desulphurization.

Nevertheless, in laying down the basis of such taxation, care should always be taken to exclude whenever possible undesirable substitution effects of pollutant production, this danger of adverse side-effects applies however, both to administrative and to fiscal measures. Significant interdependences of emission genesis can be dealt with precisely within the framework of the comprehensive application of general taxation of pollutants by means of systematic equal treatment of substitutive individual components. In this context individual indicators can in some cases be combined into aggregate parameters for tax assessment, thus making fot simplified fiscal procedures. For example, effluent discharge into waterways can largely be expressed in terms of generalised "inhabitant equivalent values" (Ref. 16), as has already been done in the

current Dutch regulations on the charges payable in respect of effluent releases (Ref. 17).

An assessment of emission charges must at all events take into account that besides providing private incentives to avoid pollution, such charges are suitable, owing to their financial yield, for financing collective waste-disposal investment, advantage being taken of possible economies of scale. This applies in particular to those nuisances which allow of the subsequent elimination of certain emissions within the context of collective disposal facilities, for which purpose the comparative costs of administrative and fiscal policy solutions must be taken into account.

The example of waterways pollution also clearly reveals the advantages of emission charges for an ecological controlled area from the standpoint of spatial equivalence: a system of effluent levies oriented towards additional releases by local polluters excludes both local distortions of competition and any further application of the "roulette system" followed hitherto among individual riparian municipalities (Ref. 18).

Altogether, from the standpoint of offering incentives to cost saving through technical progress or plant modification, this kind of emission charge seems best suited to the purpose.

Finally in cases where protection of the environment is an overriding consideration because of the danger of irreversible damage, prohibitions will also be necessary.

In addition, thought should be given to laying down pollution quotas in the form of statutory limits on emissions by particular plants. True, these direct interventions ignore the fact that it may be quite appropriate to allow different levels of pollution in different regions, and so run counter to the principles of threshold-value formulation. On the other hand they do not take account of the fact that the pollution load increases with the further expansion of production and the growing number of new sources of pollution, even if, in accordance with the regulations, the stipulated quota is not exceeded in the case of any single source.

Useful long-term scope for relief and protection of the environment should be afforded through appropriate prompting of economic operators by means of appeals and collective strategies of persuasion for restraint of individual consumption and for socially responsible operation. The State will also aim at fostering a growing awareness of the environment by informing public opinion in detail as to the existing and potential dangers, showing the causes and consequences of the hazards as an overall pattern and indicating possible countermeasures (Ref. 19). At the same time, however, it must endeavour to steer this environment-consciousness, when once aroused, away from any largely emotive area.

The preceding catalogue of conceivable and existing environmental protection measures aimed at achieving or maintaining certain threshold values is essentially a component part of the time strategy for influencing future developments and altering existing conditions. The likelihood that, even in the future, industrial growth will not rule out the formation of extreme types of spatial development in the form of concentration centres, and hence pollution centres, on the one hand, and areas capable of absorbing pollution on the other, renders it necessary to take action under the spatial strategy. To some extent use can be made of the instruments available to the time strategy if, through tax incentives, subsidies and concessions for the moving of plants and the setting up of new ones with a view to relieving environmental stresses, and through favourable capital market conditions, guarantees, etc., this strategy promotes dispersals under the policies for the location of industry and the structure of individual sectors. But the measures of space-oriented environmental protection are only likely to succeed (except, of course, for bans and other dirigistic controls) if the factors relevant to the entrepreneur's choice of site are lastingly modified and the scope open to the enterprise looking for a site is extended. To this extent measures of infrastructure policy assume an important role within the environment policy. Apart from the vast problems of infrastructure policy in general (which are also of relevance here but the discussion of which would exceed the compass of this report, the location of environmentally damaging industries needs the stimulus of a climate favourable to industry whereby a sympathetic attitude on the part of the population and local authorities of all kinds towards the establishment of industries is assured even in cases where environment-conscious opinion is against accepting polluting industries and increases the risk of idle infrastructure capacity. Only then can private enterprise proceed with infrastructure investment as initial priming and, through judicious capital outlay, take advantage of the opportunities created.

III—ENVIRONMENTAL STRESSES AS A CONSEQUENCE OF INDUSTRIAL DEVELOPMENT

A—Overall economic and industrial growth

The attempt to assess the effects of environmental protection measures on industrial development is motivated above all by the dependence of future environmental stresses on the overall economic growth process and the necessary changes in the production structure within the national economy. To this extent it must be made clear that it is the necessary changes in production processes and industrial manufacturing programmes which substantially determine future environmental stresses. This is the justification for stressing the ambivalent role of industrial development as a decisive growth promoter and a principal cause of pollution.

The OECD, in its projections for the 1970's (Ref. 20), set as a growth target an average annual GDP increase of 5.3% for the OECD as a whole and

5.2 % for the EEC. The GDP growth rate set for West Germany is 4.6 % If West Germany is not to jeopardize the OECD targets, it will have to aim at an average annual growth of 4.6 %.

In the achievement of this goal, the processing industries assume a special importance. There are two reasons for this: the exceptionally large contribution of these industries to the GDP (41.2 % in 1968) and their big share in the gross capital investment (21.7 % in 1968).

For an assessment of future environmental stresses an overall analysis is not enough; rather is it necessary to adduce specific sectoral developments, which are briefly outlined below.

In view of the more slowly increasing demand in the industrial countries, the production prospects of West German and other European metal manufacturers depend largely on their export prospects. Since more and more developing countries are proceeding to build up their own heavy industry, our share of the world market can be expected to decline in future so far as the simple grades are concerned and are only likely to remain constant in the case of special products (Ref. 21).

High growth rates in goods and passenger transport indicate that the vehicle manufacturing sector will at least maintain its present share of the world market.

The marked tendency towards product diversification in electrical consumer goods, in conjunction with the high long-term demand for electrical capital goods, points to a consistently high growth rate in the electrical industry.

Development in the mechanical engineering sector will in future depend on three factors. Firstly, some quarters, e.g. mining and agricultural machinery constructors, are encountering a declining or stagnating demand. Secondly, the efficiency of the machines is constantly increasing disproportionately to the product value, so that demand per unit output is declining at the user end. Thirdly, a falling-off in the growth rate in competition with electrical engineering is to be expected owing to substitution of electronically controlled for mechanically controlled equipment (Ref. 22).

Growth in the food, drink and tobacco sector will in future tend to decline owing mainly to the comparatively low elasticity of income (Ref. 23).

Unless the relatively labour-intensive textiles, clothing and leather sector is able to achieve marked gains in productivity through heavier capitalisation, the wage increases that accompany a growing per capita income will probably cause a marked deterioration of the siting conditions in West Germany (Ref. 24).

In the case of the chemical, petroleum refining and coal derivatives sector, with its broad range of individual products, demand in the present phase of industrial development is higher than average. Accordingly, the growth of investment and planned capacity expansions in this sector are above the average for all other branches of industry (Ref. 25).

In the other processing industries the divergent tendencies among individual branches have in the past frequently cancelled each other out; it is therefore to be expected that in future too their development will keep step with that of the national product.

Besides structural changes due to growth, the effects of technical progress, i.e. new production processes and programmes, are important. Here again, past trends justify forecasts of changes in the means of production and in the products. In those sectors of manufacturing industry which lead in the turnover race, the production programme alters particularly quickly owing to the incorporation of new or modified products (Ref. 26). On the other hand, the sectors with the slowest rate of turnover growth have hardly had a chance to market a new product. As regards future development, it follows above all that new chemical and plastic products, electrical and electronic apparatus, short- and long-distance transport equipment, together with the corresponding means of production, are affecting the production programme of the industrial sectors.

The aim of the following paragraphs is to illustrate the extent to which growth-specific components turn out to be factors in the causation of environmental stresses. For industrial development, characterized as it is by structural changes, process and product innovation, points to the likelihood of continued future dependence on the use of natural resources and consequently a further endangering or impairment of health, threats to water supplies, loss of recreation areas and decay of economic and cultural assets.

B—Environmental stresses due to expansion of production and to structural changes

The basis for a forecast is the expectation that, taking account of structural changes in industry, the mere expansion of production volumes will entail additional stresses and excessive demands upon the environment.

Industrial capital expenditure, the real share of which in manufacturing industry's gross investment in fixed assets is admittedly declining in many areas, but without which the rationalisation of production through equipment investment is often not possible, reveals its effect on the environment in an ever-growing demand on land areas formerly devoted to agriculture or forestry. As far as West Germany is concerned, only approximate values can be given for the land requirements up to 1980. These are as follows: reduction of arable land surface: 650 000 to 700 000 hectares; land needed for housing purposes:

290 000 hectares; for highways: 120 000 hectares; for airports and airfields: 11 000 hectares; afforestation areas: 120 000 hectares (Ref. 27).

Comparison of the shrinking agricultural land surface and the rising demand for land does, however, disregard an area of 109 000 to 159 000 hectares that remains available for future environment-shaping purposes in that, for example, forest land is increasing at more than the estimated rate and nature reserves and general recreation areas are being laid out. Another possibility for the 1970's is the purposive transformation of uncultivated moorland, derelict land and sterile land for ecological compensation purposes.

The expansion of production volumes also means an increase in industrial wastes. The most important substances involved are those which, even after treatment, are not susceptible of further use or regeneration and the disposal of which can be hazardous, e.g. rejected batches from the chemical industry, pasty waste from dye and paint factories, sludge from neutralization plants, radioactive waste, etc.

Most problems of waste disposal can, however, be reduced to the drastically worsening impairment of the environment by air and water pollution when air and water are used as transport media for pollutant releases or when the air and ground water are burdened by the combustion and storage of wastes. The bulk of air pollution is attributable to the increased conversion of energy, since fossil fuels need oxygen to release their chemically bound energy. Moreover, greater production of goods from the various raw materials and the necessary transport activity involving vehicles with internal combustion engines cause increasing emissions of air-polluting substances, primarily in particulate and gaseous form. Watercourses are burdened chiefly with industrial effluents, including cooling water, chemicals and mineral oils. In 1969, 8.4 million cubic metres of household waste water and 35.6 million cubic metres of industrial effluent, including 18.6 million cubic metres of cooling water, were produced in West Germany (Ref. 28).

Expanded production implies above all an increase in these burdens on the environment from manufacturing industry, especially from the high-growth sector of chemicals, mineral oil and plastics processing, in step with industrial output, i.e. that there is a proportional relationship between production and pollution.

C—The role of technical progress

This, however, disregards the influence that the achievement of technological advances may have on the increase in environmental stresses resulting from the volume and structure of production.

The past provides examples of technical progress which, intentionally or unintentionally, has brought with it environmental bonuses. Thus the adoption of

the oxygen blowing process in the steel industry, both as a means of increasing production capacity and to replace conventional processes, not only brought economic advantages in the form of cost economies and shorter batch sequence times, but also led to a substantial reduction in pollution because much less gas and dust are emitted in this process than with older methods. LD converters, for instance, give off only 200g of dust per ton of steel, whereas basic Bessemer converters produce 7kg of fine dust per ton of steel (Ref. 29).

Let us consider the following hypothesis: crude steel production in West Germany rose from 18.6 million tons in 1952 to 45.3 million in 1969 (Ref. 30). Production in basic Bessemer plants exclusively would have meant an increase in dust emission from 130 200 tons in 1952 to 317 000 tons in 1969. If, however, production in 1969 had been entirely by the oxygen blowing process, the dust emission would have been only 4 160 tons. Of course, the actual dust emission is higher than this favourable figure. Nevertheless, between the time of its introduction and 1969, the share of oxygen-blown steel in the total output increased to 46 % as against only 15 % for basic Bessemer steel, 29.8 % for open-hearth steel and 9.1% for electric furnace steel (Ref. 31). Since 1970 the production of basic Bessemer steel in the Ruhr has ceased entirely, and in the whole of West Germany there have been only four plants still making basic Bessemer steel. The drastic cut-back in basic Bessemer working in the Ruhr is probably attributable to the clean air act in force in North Rhine-Westphalia, with its provisions for the installation of dust-removal plant in basic Bessemer steelworks (Ref. 32). The achievement of technological advances also shows regional differences the advantages of which as regards pollution abatement first become apparent where timely action has been taken to combat existing pollution.

In addition, a whole range of pollution abatement processes have been devised the development of which has followed, after a certain time-lag, the technical innovations that caused the pollution, or has in some way been connected with such innovations; some examples are plants for decomposing toxic substances and precipitation processes for removing radionuclides from radiochemical laboratory waste. Perhaps it is precisely technical progress by way of improvements in the component elements of production processes that holds out the promise that, in efforts to smooth out the organisation of the processes used, account will be taken of pollution abatement aspects. However, this promise remains but a hope that could be shattered by opposing tendencies, especially if the technical innovations succeed in preventing one kind of pollution merely to create new or different kinds, and so are only able to effect regroupings.

These considerations, which in the final analysis should prompt us to call into question the proportionality between the expansion of production and the increase of pollution, show that a concept of technical progress defined exclusively in terms of efficiency increases is no longer acceptable in the environmental context. The fortuitous consequences of past process and product innova-

tions, in the form of increased or reduced pollution, justify the wide scope th
is accorded to innovation-promoting measures in the discussion of enviror
mental policy instruments.

D—The influence of concentration and dispersal tendencies on environme stresses

Besides the growth-conditioned evolution of production, the siting decisions c industry will affect the environment through additional burdens due to concer trations on the one hand and through reduced stresses due to dispersals on th other hand. The pattern of factors determining the location of industries ha in the past led to local concentrations, with the result that industrial growt tended to build up in high-density areas. The view that enlargement of th market potential makes for cost reductions and that the available infrastructu enables firms to realize economies because of the better framework condition has favoured such concentration processes, aided by bandwagon effects an imitation. In the recent past the pattern of siting factors has changed to som extent insofar as previously weighty factors have lost a great deal of the significance or new ones have gained importance and encouraged trends tc wards dispersal. The increased demand for space in automated production ha entailed the removal of plants into rural districts, and the dwindling importanc of dependence on materials owing to specialised manufacturing processes an the substitution of new for traditional raw materials has removed the forme need to have materials stored in close proximity. Reduced haulage costs an improved transport equipment have brought about a lesser incidence of tran port costs. In addition, many firms have attained a size which enables the to operate on a national or international scale as regards both sales and pro curement, so that the original reasons for the determination of locations hav become unimportant insofar as they concerned the available sales and procure ment potentials.

The extent to which the commissioning of new plants and the closing down c old ones, the expansion, contraction or stagnation of quantitative and qualita tive procurement and sales relationships, and the adoption of new productio processes as a result of technical progress hold out a prospect of greater c lesser environmental stresses created by concentration and disposal trend can be shown, albeit not entirely exhaustively, with reference to the exampl of the iron and steel industry (Ref. 33). Since coal in the form of coke i used in the smelting process and is therefore a material that loses the whole c its weight, the rule grew up that the ore should be brought to the coke. Nowa days, however, the quantity of ore in the furnace charge greatly exceeds tha of the coke, so that owing to the lower transport costs the smelting plan should really be located over the ore deposits. However, the higher ore pro curement costs incurred by a coal-based smelting plant are now largely offse by other cost-saving factors such as the energy link between collieries, cokin plants, blast-furnaces, steelworks and rolling mills, and the improved traffi

routes and means of transport. In practice, a change of location is only possible through the establishment of new enterprises, since the shifting of blast furnaces and steel works is hardly feasible in view of the high investment they represent. The Ruhr became the most important centre of the iron and steel industry in Germany because of its extensive coal deposits, its favourable location on efficient waterways and the presence of highly developed processing industries in the same area. In recent years coastal locations have grown in importance by virtue of a better transport cost situation, since raw materials, especially ore, are being imported in ever-increasing quantities from overseas. The presence of raw materials resources on the spot is no longer the only consideration and it may therefore be expected that in future more and more new enterprises will be sited in coastal areas and the additional pollution loads no longer concentrated exclusively in traditional locations.

Another example is that of the chemical industry (Ref. 34). Here too, especially in the case of firms producing chemical basic materials, there was in the past a tendency to gravitate towards the raw material occurrences. Coal is the essential raw material for calcium carbide, which in turn is the starting material for the manufacture of certain plastics and fertilizers. In addition, the tar produced during the gasification of coal is used in the manufacture of dyes, pharmaceuticals and plastics. Rock salt is the raw material for soda production and the preparation of caustic soda, chlorine and sodium. The series of important raw materials also includes potash, pyrites and lime. Where it was impossible to obtain a site in the immediate vicinity of the raw material deposits, a location which provided good transport facilities was chosen In West Germany this is reflected above all in the concentration of chemical manufactures on the biggest inland waterways, on the Rhine and in the Rhine-Main region. Furthermore, the above-average investment in fixed assets and the advantages of mass production promoted the rise of large concerns at scattered locations. Other specialized sectors of the chemical industry chose their sites with a view to being near user centres, e.g. the cosmetics and pharmaceutical industries. In contrast to such concentrations, there have recently been trends towards dispersal in some branches of the chemical industry; these trends stem from a continuous process of substitution in the raw materials sector, and especially from the replacement of coal by oil or natural gas as the basis for the production of most starting materials and intermediates. As the advance of mineral oil products will in future go hand in hand with a constantly ramifying pipeline system, firms which are remote from the traditional locations will reap the benefit of low materials procurement costs so long as they establish themselves near the pipelines. Hence no fundamental regional restructuring of the chemical industry is at all likely, since a great deal of the refining capacity has already been built up in centres of concentration. Thus there is, after all, the possibility of selecting sites outside the high concentration areas for future new industrial establishments.

While economic history goes to show that industrial concentration was a necessary condition for efficient economic growth, the present evolution re-

veals that these factors are now less important. To some extent, therefore, the promotion of future dispersals affords a starting point for environmental policy without impairment of growth targets.

IV—REPERCUSSIONS OF EXISTING AND POTENTIAL MEASURES ON INDUSTRIAL DEVELOPMENT

The forecast of industrial development presented in Section II took no account of restrictions imposed by environmental policy. The estimates showed that the importance of individual areas of activity in the manufacturing industries will continue to vary in the future. The forecast of future products was based mainly on historically discernible changes in industrial production programmes, the conclusion being that in future too the high-growth sectors can be expected to diversify their product range by more extensive innovations.

The development trends outlined above illustrate the future increase of pollution. Even if the proposed measures for environmental protection are capable of bringing about a reduction of the pollution burden, there remains the question whether the scope of the environmental policy is sufficiently wide not to affect the planned growth targets. Since the industrial development factors necessary to growth have also proved to be conspicuous factors in the causation of pollution, it is essential, when assessing the repercussions of environmental policy measures on the future of industry, to determine the remaining scope for the achievement of growth targets.

A—Allocative effects of environmental policy measures

Environmental measures differentiated according to locality will have a decisive influence on the entrepreneur's choice of site. The internalization of social costs in the foregoing sense by the fixing of prices for the use made of the environment means that private industry will choose its sites under new conditions. Individual firms will weigh the cost-lowering advantages of concentration against the increased costs for use of the environment that greater concentration involves. The order of magnitude of the costs to be borne for environmental stresses makes it likely that dispersal tendencies will result. These tendencies must be regarded as favourable since they serve to correct distortions of competition and at the same time make for an optimum-cost space allocation.

A thus regionally and internationally well-balanced distribution of industrial production must not, of course, be considered solely from the positive standpoint of correcting distortions of competition and facilitating relief of the environment in regions previously threatened. Dispersal always means at the same time a potential environmental hazard to areas hitherto reserved for

leisure and recreation. Hence it is always necessary to weigh up the attainable reductions of environmental stresses.

As to the influence of spatially oriented environmental protection strategies on the sectoral changes within manufacturing industry that can in any case be expected, the answer must be that the expanding sectors are more likely to be able to observe or achieve the required threshold values, since they are relatively less restricted by the obligations and financial burdens imposed on them and are able to develop adequate flexibility for the necessary plant conversions and modifications of production processes

On the other hand, the slow-growth or declining sectors have to face considerably greater problems of adaptation and finance. It can therefore be inferred that the measures will inhibit the expansion of growth industries but will accelerate the shrinking process in the case of the weaker ones. The interlinking of the various branches within manufacturing industry acts as a catalyst via the multiple supply relations between individual areas of production, so that the inhibiting effects of the measures increase in proportion to the degree of interlinking with other sectors. For example, in terms of gross output value, the chemical industry drew 34 % of its preliminary services in 1964 from the chemical industry itself, 2.8 % from the petroleum refining industry, 5.4 % from the non-ferrous metal industry and 2.6 % from mechanical engineering (Ref. 35), so that any lowering of the production level in the chemical industry could be expected to have substantial multiplier effects.

In spite of the relative pollution reductions due to the sectoral and spatial allocative effects, the intensified re-use of waste products will be inevitable. This means that expansion of the waste-disposal industry, i.e. recycling, will be of great importance. The growth potential of the waste-disposal industry must then be capable of offsetting any decline in the growth rate of other sectors. However, this statement relates only to the gross national product and not to real consumption, which has to be regarded as the actual final aim of the economic process.

The individual allocative effects described above can be obtained more quickly if, through positive announcement effects, firms are induced, as it were, to anticipate State action, thus considerably reducing the necessity for it.

B—Review of various repercussions in production processes operating methods and manufacturing programmes

Technical progress has in the past been directed mainly towards the development of physical strength, high speed, great precision, unflagging energy and the possibility of cost economies, for it has been promoted specifically by a creature that is neither particularly strong nor particularly fast, is by no means accurate and tires easily. The furthering of technical progress towards a

solution of environmental problems has also endeavoured to add the concept of environmental innocuousness to this list of criteria. Interaction with the environment must be applied as a yardstick for the evaluation of the progress achieved, that is to say technical innovation is to be accepted as progress if it benefits the environment whilst ensuring at least the same level of production and the same quality of product.

Hence, inasmuch as the furtherance of technological and technical progress aims directly at developing processes and products that reduce environmental stresses, it can be expected that, through the evolution of process engineering and production factors, the production processes will alter course towards the goal of environmental relief.

Also conceivable, however, are changes in production processes that do not spring from technical innovations but, owing to the pressure of environmental protection measures and a lack of opportunities or subjects for innovation, take the form of a return to older but environmentally beneficial methods.

If the protective measures succeed in accelerating the previous rate of technical progress and in adding consideration for the environment to the list of factors that influence the decision to effect process changes, then the adoption of more environmentally beneficial processes can be correspondingly speeded up.

But the mere overhauling of production processes and manufacturing programmes can exploit only very inadequately the potential influence of an intensively promoted technical progress in the context of environmental protection efforts. This gap will have to be closed by the development of waste-disposal techniques and the expansion of recycling activities both in private industry and at infrastructure level.

The underlying idea of recycling is the recognition that a large proportion of the waste-product releases and pollutant emissions represents a loss of material, e.g. that the sulphur dioxide gas vented to atmosphere is a waste of raw material, or that water which is pumped into rivers at too high a temperature is a waste of calories. If the protection measures are aimed, among other things, at letting environmental protection feature as a factor in cost calculations, the economically rational reprocessing of waste and pollutants can have a favourable influence on costs.

Examples of attempts so far made to recycle recoverable materials show what importance this should be accorded in future, both from an economic and from an environmental point of view. Thus, for instance, the ash that occurs during the production of sulphuric acid can be turned to account by literally leaching out the iron, copper, zinc, lead, cobalt and silver contained in it. The hydrochloric acid vapours produced during the combustion of PVC in suitable incinerators can likewise be recovered. It has also long been possible to work up the slag from blast furnaces, which used to be regarded as a waste product,

into blast-furnace cement. In salt mining it was formerly necessary to hack through the unwanted potash salt formations in order to reach the rock salt desired. The accumulation of potash in huge quantities eventually led to the production of potassic fertilizers. Paper mills can convert their waste into filter charcoal, which is then used to purify sewage, and slag and fly-ash can be used for the manufacture of building blocks. In addition, the demand for cooling water can be reduced by recycling the water already used. Even the heat released during the incineration of refuse in furnaces or flame chambers can be used to drive district heating and power plants for the supply of central heating, hot water and electricity. And shredded presorted garbage can be rotted down in composting plants, e.g. open tips, silos or bioreactors, after enrichment with digested sludge from sewage treatment plants, to produce a peat-like soil.

The forms taken by the repercussions of environmental protection measures on the production processes, especially in view of the growing importance of the predominantly integrating factor of recycling, are likely to bring about changes in the structure and size of enterprises.

On the one hand, the expenditure on appropriate modification of production processes by recycling will in many cases exceed the financial means of individual firms, and on the other hand, the adoption of recycling processes will only be economically justified if it is done on a comparatively large scale, so that firms will be compelled to form collaborative associations by virtue of which they renounce unrestricted use of their own economic freedom of action and submit to joint action as regards the operational task of process modification in the interests of the environment. Such action may even go so far that environmental policy requirements will lead to the total renunciation of economic freedom of action and so bring about horizontal and vertical concentrations. In conjunction with the advantages afforded by a potential approximation to optimum dimensioning of plants and enterprises as regards benefits or economies of scale, such concentrations may be capable of neutralizing adverse effects of industrial development.

In addition, it seems relevant to point out that environment-polluting production activities will be apportioned among merged firms in such a way that the individual plants will provide fewer services and thus contribute less pollution if, through specialization of services, they can concentrate on less extensive but more specialized disposal activities. Mergers are also, of course, conceivable for reasons connected with the joint development of environment-relieving processes and products and the deliberate strengthening of firms whose competitive position has been weakened as a result of environmental requirements. Such developments would entail changes both in the structure and in the size of firms.

The aspect of change of location becomes more important in the light of existing or planned waste-disposal arrangements. In endeavours to curb or reduce

impairment of the environment by the manufacturing industries without jeopardizing certain growth targets, a special role falls in many respects to expansion of the waste-disposal and capital goods sectors insofar as their production is directed towards environmental protection.

Both for production and waste-disposal activities, production factors will have to come into play. The increased input of production factors in the waste-disposal activities means a reduction of possible factor input in other branches of industry (Ref. 36).

In the event of failure to achieve an adequate rate of general technical progress, the necessary increase in disposal activities will be accompanied by a relative deterioration in the supply of goods. To this extent the growth effects arising out of the demand for preliminary services for the disposal sector would have to outweigh from the standpoint of the national economy the relative deterioration of the supply position. The disposal activities will therefore be required not only to do away with pollutant emissions but also to work up the pollutants into re-usable material (Ref. 37). In the final analysis the location and capacity of the disposal installations add to the alternatives as regards decisions determining the choice of industrial sites.

Detection and monitoring of the sources and forms of pollution as a prerequisite for disposal activities call for new equipment and instruments such as probes for monitoring the composition of waste gases, meters and analysers for the detection of fluorine compounds, heavy-metal aerosols, hydrocarbons and odorants, ion-specific electrodes, apparatus for the gravimetric determination of solids and the measurement of biological oxygen consumption in real time, and analyzers for the detection of oil traces and other high-molecular organic compounds (Ref. 38). In addition, non-polluting products will emerge which can replace conventional environmentally harmful ones and bring about their decline, some examples being lead-free motor fuels, organic fertilizers, biodegradable plastic packagings, pesticides of short half-life and low mammalian toxicity, fume- and noise-free means of transport with novel propulsion systems, and phosphate- and nitrilotriacetic acid-free detergents (Ref. 39).

Substitution processes, however, are also triggered off by other effects: similar products manufactured by methods involving differing pollution loads will have differing price structures owing to the financial obligations arising from environmental policy, so that the product of the less environmentally harmful process can be offered more cheaply, Similar discriminatory effects will result from successful appeals to consumers to give up the use of environmentally harmful products, as well as from the placing of appropriate emphasis in publicity material on the environmentally beneficial character of one's own products as against the environmental noxiousness of rival products.

Lastly, the disappearance of certain products from the market will attribut-

table to prohibitions imposed under the priority accorded to protection of the environment, if research results do not exclude the possibility of health hazards. Very recently a number of chemical works declared their readiness, in anticipation of a ban, to cease production of polychlorinated biphenyls (PCB), which were being used as fire-resistant coolants, lubricants and insulating materials and also as plasticers in many plastics, paints, varnishes and adhesives; for PCB residues in foods, air and water have been known to cause a severe skin inflammation known as chlorine acne.

V—PROSPECTS AND CONSEQUENCES

The foregoing remarks were intended to reveal the dominant economic implications of environmental protection. The measures discussed inevitably need to be harmonized and unified within the Community, for only in this way will it be possible to make use of the Member States' respective prosperity-promoting advantages.

But there remains the question of how the Community should deal with distortions of competition on a world-wide level. Here it must be borne in mind, first of all, that imported products are cheaper than EEC products because they have little or no financial burden to bear as a result of environmental protection measures; no less important, however, is the case where the disposal of the wastes that stem from the end-use of imported goods involves higher costs than do domestic products. In the first case it might be mooted that an additional customs duty be imposed which should in principle be based on pollution in the country of origin. Such a procedure is impracticable, however, for it cannot be the Community's duty to act as a sort of world policeman for environmental protection. One solution would be to resort to compensation for similar damage to the environment in the EEC This would also have the advantage that if customs dues in the Community were higher than the costs of pollution in the country of origin, the latter would have an incentive to take environmental protection measures. In the second case an import duty on such products is likewise recommendable. Its form should be based on the waste-disposal costs of comparable domestic products. This too, would stimulate the introduction of less-polluting production techniques, once again in the context of supranational environmental protection.

Many of the measures discussed presuppose that our knowledge of the relations between ecological and economic systems, as well as of the distribution and composition of the harmful effects of pollution, will be considerably extended. It is therefore necessary to intensify research into diffusion relationships and to increase the international exchange of information in this field. It is also important to know to what extent the overall damage caused by pollution is the sum of the effects of individual pollutants, or whether the noxious effect occurs only when emissions from various sources coincide. For any

application of the principle of "making the polluter pay" presupposes the unequivocal imputability of noxious effects.

Particularly close attention should, however, be devoted to the question of when public investment for improving the quality of the environment is preferable to private investment for avoiding pollution. On the one hand, State investment might be advantageous because efficient anti-pollution techniques call for a certain minimum amount of investment, which cannot always be achieved by the private sector. In such cases, moreover, it would be possible to exploit the associated economies of scale. This question is therefore also of interest because environmental assets have the character of collective assets, so that—just as impairment of the environment leads to multiple negative external effects—improvements to the quality of the environment have manifold positive external effects (Ref. 40). It must be stressed, however, that this does not signify any retreat from the market-economy principle. The market mechanism should always be resorted to where it is capable of yielding the better results. Hitherto the self-regenerating powers of a market economy have not been edequately developed. They ought to be set in motion and strengthened by economic policy before their absence is construed as a sign of basic flaws in the market economy.

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THE PROBLEM OF FINANCING THE INCREASING COST OF INFRASTRUCTURE AND SOCIAL INVESTMENT WITHOUT DISRUPT—THE HARMONIOUS DEVELOPMENT OF THE COMMUNITY

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INFRASTRUCTURES AND PROTECTION OF THE ENVIRONMENT IN THE COMMUNITY. PROBLEMS OF LIMITATION OF COSTS AND FINANCING(*)

H. NEUMAN

I—DEFINITION OF SUBJECT—CLASSIFICATION AND ULTIMATE AIM OF INFRASTRUCTURES—NEED TO REVISE THEIR TRADITIONAL CONCEPT FOR PROTECTION OF NATURE AND LIFE MEDIUM

(a) The collective equipment—or infrastructures—are usually distinguished from equipment described as directly productive—or superstructures—formed with a view to market production of goods or services. In these economies of the market, the former are considered to be within the jurisdiction of public authorities and the latter to fall in the realm of enterprise.

These classifications are hardly satisfactory. In fact, certain infrastructures are within the jurisdiction of enterprise, their services being sometimes free and sometimes sold at a commercial price or non-commercial price. A case in point is, for example, power, as are, the railways, telecommunications, hospitals and even universities and motorways. On the other hand, enterprises often make investments which are not directly productive, in order to ensure or improve their working conditions. This is the case for instance when they finance roads, vocational schools or cultural or sports installations Under these conditions—this is rather more a function of their ultimate aim—public interest in its broadest sense—which we suggest for defining and classifying infrastructures, whatever may be their mode of formation, management or financing. In this context, it is possible to propose a primary distinction between:

1. Infrastructures with economic aims, which condition the activity of enterprises and the material welfare of men: for example, transport, power, telecommunications.
2. Infrastructures with socio-cultural aims, which condition the physical, intellectual and moral welfare of men: for example, health, education, culture and leisure activities.
3. Infrastructures with administrative aims, which condition the effective management of the community and its protection by public powers and services: for example, administration, police and defence.

(*) Translated from the French

Undoubtedly, certain of these infrastructures do not have one sole function whose nature isolates them from all others. However, such a classification would allow better identification of their principle objectives and, hence, better specification according to their goal, various categories of collective equipment, costs and recurrent expenditure incurred in their use.

(b) On the other hand, the very concept of infrastructures produces a complementary proposition. The management of land, collective equipment and development should henceforward be conceived "in accordance with nature" and with a view to protection of the life medium. An increasing number of voices of increasing authority are now proposing this.

Philippe Saint Marc in particular[1] has given a warning that it has become urgent and vital to react against a tendency to self-cancellation of the growth of industrial nations, which is all the more marked as those activities which are favourable to the natural environment represent no more than a small part of production activities, whilst "neutral" or "injurious" activities form the major part. Added to industrial pollution (noise, air and water pollution, refuse) those of space (human overcrowding reduction of green areas, distance from nature) tend, according to him, to give rise to a retrogression of the life medium which is greater than the progression of the standard of living measured in terms of national accountancy. As it produces a general psychophysical impoverishment of man, the progress of this pollution threatens to reduce his general welfare at a greater rate than it can be increased by progress in the standard of living.

Although it is difficult to estimate the full extent of this threat, its existence cannot be challenged. This brings into question again the still too "productivist" and short term traditional approach and concept of collective equipment without sufficient regard to the protection of nature and the life medium.[2]

On another plan, this threat suggests that the approach towards the problems of infrastructure should be broadened. In fact, many of them cannot be completely or correctly solved, save by international cooperation and solidarity reached on the level of national and world groups. In this respect the extension of the role of the organs of the European Community appears in particular to be increasingly necessary.

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1 *La Socialisation de la Nature* – Ed. Stock – Paris 1971

2 Cf. also on this subject L. Gérardin *Les Futurs Possibles* (Hachette 1971), p. 65: "It is going to be necessary for economists to change their methods and to accept that what Bertrand de Jouvenel has called the "amenities of life", the quality of life, must be taken into account. Sums spent on the restoration of something which has been destroyed by different means will have to be counted as Negative, and not Positive, as is the case today through a totally incomprehensible aberration. If we do not take care it (the growth) will go beyond the limits and become, how ridiculous this is, a real reduction in the interconnected standard of living with an apparent economic growth."

II THE PRESENT AND THE PAST—TOTAL DATA AVAILABLE—COMMENTS ON THESE—IRRATIONAL UTILISATIONAL OF RESOURCES—SECTIONING, DISPARITY AND DISPERSAL OF EFFORTS—CONSEQUENCE OF LACK OF HARMONIZATION AND COORDINATION OF POLICIES

(a) It is impossible to classify statistically the infrastructures within the Community according to objectives.[3] But this does not prevent the location of the problem of their financing and the search for solutions. In fact, even if the means of this financing are variable and complex, in its total sense this problem is more simple. It concerns the financing of the totality of the infrastructures and directly productive equipments, without producing harmful imbalances. One knows that such imbalances can originate, for example, from a reliance on taxes, savings or credits, internal or external, which is excessively marked or is resented as being too restrictive and which gives rise to an uncompensated monetary creation. Since the means of financing the totality of investments are limited, the allocation of these means without causing disorder poses problems of priority and choice:

(1) In what measure should these means be allocated both to infrastructures and to directly productive equipment?
(2) What infrastructures take priority in being established or in improvement?
(3) What proportion of the resources should be allocated to investments in the public and the private sector?

In this context, the evaluation and prospects of investment expenditure must first be dealt with on a macro-economic basis. Despite inadequacy, available data of this nature can throw useful light on the subject.

(b) Macro-economic data concerning gross fixed capital formation in the Community

Total public investment lies between 14 and 15 % of the gross fixed capital formation during recent years:

[3] As has been pointed out, some are set in motion by private and well ordered enterprises, hence, in directly productive equipment. Others financed by public or mixed enterprise, appear in national accounts under the heading "enterprises". Furthermore, infrastructures of the same kind, depending on the country, are sometimes in the charge of the State and sometimes of public or mixed enterprises.

TABLE 1
Gross Fixed Capital Formation in the Community

	in millards of units of account at current prices				% of the total			
	1967	1968	1969	1970	1967	1968	1969	1970
Enterprise investments	47.7	51.8	60.8	73.7	58.5	58.2	59.6	60.7
Construction of dwellings	21.8	23.8	26.7	30.6	26.8	26.7	26.2	25.2
Public investments	12.0	13.5	14.5	17.1	14.7	15.1	14.2	14.1
Total:	81.5	89.1	102.0	121.4	100.0	100.0	100.0	100.0

Source: Banque Européenne d'Investissement, Rapport Annuel (Annual Report) 1970, page 36.

On the other hand, it would seem that the gross fixed capital formation of public administrations has been relatively stable in relation to the whole and in relation to the gross national product (GNP), at current prices, in member countries during the period 1961/70.[4]

TABLE 2
The gross fixed capital formation in public administrations in relation to the internal GFCF (I) and in relation to the GNP at current prices (II)

	I		II	
Country	Average 1961/70	Variance	Average 1961/70	Variance
Germany	16.0	1.01	4.1	0.35
Belgium	13.2	2.0	2.8	0.45
France	13.2	0.57	3.2	0.31
Italy	12.4	0.95	2.6	0.21
Netherlands	19.1	0.72	4.8	0.25

Source: Calculated on bases given by the OECD.

These overall figures require comment. In fact, the investments must not be

[4] The variance is higher for Belgium due to a greater effort in infrastructure during the last three years.

regarded solely from a quantitative point of view or even from the point of view of their origin whether public or private. More than ten years ago, a report prepared by the OECD[5] concerning investments of the member countries during the decade 1950/59 noted the absence of any precise relation:

(i) between the rate of investment and the rate of growth;
(ii) between the share of public investments in the GNP and the rates of investment and growth;
(iii) between the investments and disposable income of enterprises expressed as a percentage of the national revenue.

The establishment of these facts confirms, although it has not yet been proved, the importance of the search for the optimum, that is to say the quality of the economic dimensions and efficiency and of elimination of duplications, cost escalation and wastage in the sphere of investment. This importance is even greater since the investments commit and determine the future. As has been stressed by P. Massé, "to invest is, in a way, to freeze".[6] Since the greater part of investments becomes more and more costly, the commitment implied becomes increasingly binding.

Furthermore, as has been recalled, certain investments compromise the life medium, that is to say the ultimate aim of all development policy· human progress. Some authoritative voices consider these investments to be on the increase.[7] Besides, it is evident that, as investment policy—be it of infrastructure or directly productive equipment—becomes more rational and draws nearer to the optimum, it can in large measure economise on methods of financing. For example, the cost of a preventive policy of protection of nature and limitation or even suppression of damaging factors could be very much less than that of rehabilitation of a damaged environment. The pollution which is caused by many industries could often be reduced through relatively inexpensive investments.

Finally, the formation of a European Community involves the search for a balanced development not only of countries but also of regions, that is special support for the conversion of backward or weakened zones.

(c) In this respect, what is the position today? Achievements are disappointing in relation to what is possible or desirable. Returning to the previous Table II, we note firstly that the level of gross fixed capital formation in public administrations in relation to the GFCF and to the GNP differs quite noticeably from one country to another. This level was relatively lower in Italy and decreased in that country towards the end of the period. It was higher in the Netherlands and Germany. Thus, disparities in infrastructure influence

[5] International report on factors of policy nature affecting investments, Bruce Williams .

[6] *Les Choix des Investissements* (P. Massé) Ed. Dunod, Paris.

[7] Cf. particularly on this subject, in addition to authors already quoted. *Le Jugement dernier* (Gordon Rattray Taylor), Ed Calmann-Levy and *Réflexions au bord du gouffre* (G. Picht) Ed Laffont.

competitive conditions and the implantation of enterprises. The regions whose economic, social and socio-cultural equipment is most highly developed are generally presenting more attraction to enterprises and to workers, having regard to the "external economies" thus created. Enterprises are attracted by the facilities afforded by a good infrastructure. Workers by the availability of adequate dwellings, schools, hospitals, transport facilities and sports and amusement facilities. However, excessively dense economic or urban concentrations give rise on the other hand, to external costs which are sometimes so high that they counter-balance these external economies. This is notably why the public powers (the Central State or regional or local bodies) scatter their land with moderately well-equipped industrial zones at the price of high expenditure. The creation of such zones, and granting of subsidies and various facilities to enterprises who establish themselves there, become the privileged instruments of regional policy. Often, direct subsidies granted in the form of capital premiums or interest payments are made up by a range of subsidies or indirect advantages which are difficult to evaluate and hence to compare.

Insufficiently coordinated, these instruments are often used in a competitive fashion to attract investors. There is no doubt that such an escalation of demand between countries, regions and even communities increases the price paid by the community as a whole for a specific volume of investments.

In addition, with regard to the time required to equip an infrastructure, many industrial zones have been prepared in expectation of potential investors. Often, these zones have become "Fehlinvestitionen", few in any industries being established there. It is obvious that this multiplication of initiatives, commendable in itself, but disparate and uncoordinated, is costly and inefficient. It is all the more so since the creation of these zones is only occasionally dependant upon satisfactory criteria of economic rationalisation. For example, new industry occupying a sizeable area, but few workers, is not always implanted in less densely populated regions. On the other hand, industries which are pollutive and of high capital intensity are set up in densely populated regions where there is an abundant work force. However, such implantations are frequently encouraged by direct and indirect subsidies which alleviate the production costs of enterprises and also give them a competitive advantage in relation to other companies in the sector. In the final analysis, the new investments encouraged by public powers could at times go so far as to create such a lack of sufficient coordination, and excess production capacity, as to bring about a price slump. In this case community expenditure, far from increasing economic productivity, would lead to wastage and create industrial difficulties liable to have social impacts.

(d) Forecasts for 1975

The disparity of efforts made by the member States of the Community on this subject appears also in the forecast for 1975. The percentages of public invest-

ment, in relation to the GNP are lowest in Italy and France. Italy maintains the same level (2.6% of the GNP) as the average rate for the period 1961/70. The same is true for Germany but at a notably higher level (4.2%). The other countries of the EEC forecast an increase of public investment in the order of 0.5% for France (from 3.2 to 3.7%), of 0.8% for the Netherlands (from 4.8 to 5.6%) of 1.4% for Belgium (from 2.8 to 4.2%). According to these facts, if things remain as they are, Italy and France could remain behind in relation to the other countries of the EEC. However, an increase in infrastructure requirements is forecast, both in the teaching and social sectors and in the economic field (ports, navigation channels, roadways, pipelines, airports, industrial zones, applied scientific research) and in the sphere of environment (ecological and anti-pollution programmes).

III—THE ENVIRONMENT

We have suggested that the problem of the environment should be brought into the conception of collective equipment programmes as a matter of priority. The world population is increasing at such a rate[8] that increasingly strong pressure is being exerted on nature and on the life medium.[9] The earth is not without limits and its natural resources are not inexhaustable. Left solely to the market forces or managed by public powers more concerned with production or strength of power than improvement of the quality of life, the industrial or post-industrial society would tend to waste resources which are irreplacable and to exploit others with lack of consideration. It has been pointed out that scientific research and the economic applications which have been unleashed in obtaining short term objectives do not take sufficient account of long term objectives. Thus the psysicist Rabi (Nobel Prize) has stressed that science is becoming "balkanised" under the influence of specialisation. He observes that the giant research machine is broken up into hyperspecialised cells which become incapable of apprehending and foreseeing how their discoveries will integrate with others and what will be their primary and secondary consequences. A similar situation occurs with the many economic initiatives both of public and private origin.

Already, to take an example, we are engaged in extracting rare minerals from the depths of the oceans, often without sufficient study of the possible repercussions of such an extraction on the marine flora and fauna.[10] In certain re-

8 Many "futurists" or "prospectivists" reckon that the world population *could be between 5.5 and 7 milliards* by the year 2,000, that is double the present population Certain people claim that some 20% of this latter figure are suffering from malnutrition and that some 60% are suffering from nutritional deficiency. It is thus unlikely that the demographic explosion which we are experiencing can be checked rapidly, even at the price of a gigantic effort in developing countries.

9 Some biologists consider the earth to be already over-populated, taking into account the resources which are available to us and the life style which we have the right to demand. (Cf. in particular P.R. and A.H. Ehrlich, "Population resources et environnement" in "Dialogue", 1971, no. 3).

10 Cf. in particular *S O.S. Environnement* Le Courrier de L'Unesco.

gions, the utilisation, and even the destruction of nature becomes such that forests, hethlands, scrub and other natural habitats disappear sometimes for ever.[11] If they are abused, fishing and hunting compromise the survival of numerous species. The disappearance of the species and their habitat cuts our genetic and biological capital, whilst producing innumerable imbalances, often as harmful as they are unsuspected.[12]

Man needs horizons. By reason of hyperconcentrations, the space available to him for his habitation, work and transport is becoming smaller in many regions. In parallel with this human overcrowding activities and dwellings emigrate to new areas of land to the detriment of green speces, sites and countryside. This inconsiderate or anarchical swallowing up of nature and of space poses enormous problems for the protection or reconstitution of the environment and life medium, the management of land, of communications and transport.

In addition, industrial waste, pollutive products and the damage to the biosphere tend to produce other shortages, notably in pure water, pure air and biologically healthy nutriments. Resources or natural elements which were once obtained for nothing now take on a commercial value, due to their increasing scarcity. New investments become necessary in order to purify the air and the water. This damage or depletion of natural resources must lead, we feel, to a fundamental revision of economic and political concepts which have, in large areas of opinion, now acquired a generally accepted status.

It is thus that the quantitative growth of goods and services, calculated by national accounting systems, is still often considered a measure of progress. However, production or consumption per inhabitant are not good indicators of welfare, since they do not take account of the qualitative aspects and, especially, those of environment and life medium. Bertrand de Jouvenel[13] has shown that the relation can even be the reverse. For example, surely the journey —above all else a permanent factor—between the place of dwelling and that of work gives more hardship than satisfaction? National accounting nevertheless places this transport within the total volume of consumption, where it is considered to be an indication of progress whilst it in fact reflects a regression in welfare.

This accounting does not take into account the external effects of production and consumption of goods and services. Such external effects (or externals) appear when the activity of an economic agent affects others without being integrated in the economic calculations. So, if these effects can produce advantages (external economies) they may also give rise to disadvantages (or ex-

11 Phenomenons of "desertisation" or "laterisation".
12 Cf. in particular *Un premier programme pour l'environnement 2000* – Review of land management (number out of sequence p. 14).
13 B. de Jouvenel: *Arcadie, Essais pour le mieux vivre futurable.* Sedeis – Paris 1968.

ternal diseconomies). This is the case with all kinds of despoilment which the development of industrial nations tends to foster, unless a remedy is found. The traditionalism of present accounting methods and economic calculation is not without incidence—far from it—on development policies and the positions of the parties and groups from which they originate. On the contrary, it breaks them down and this slows down the search for optimum utilisation of resources.

The problem has not escaped the attention of certain economists. Even in 1920 is was brought up by Pigou.[14] More recently, many "futurists" and increasing numbers of institutes or research groups are worried by this. Nevertheless, to date, apart from a few applications, these worries have hardly led to any true environmental policy, encompassing or orienting investment decisions in both the infrastructure and directly productive spheres.

Without going so far as to raise cries of alarm,[15] one must observe the increasing threat of disadvantages caused by the absence of any such policy. The economy today is often developed at the expense of nature and of the medium and quality of life. The search for a balance between the standard and quality of life must therefore become the focal concern of all economic, industrial and social policies, and on international, regional and local levels. The necessity of international solidarity and cooperation in these areas, mentioned in the introduction, will be more easily appreciable if we recall briefly certain problems posed by the pollution of water and air and by the utilisation of earth and space.

IV—POLLUTION

Public opinion in industrial nations is becoming aware of despoliations and pollution because their effects are becoming increasingly apparent.

(a) The water is suffering increasingly harmful adulteration. The oceans are the final resting place of industrial, urban and agricultural waste. It has been *estimated*[16] *that between three and five million tons of hydrocarbides are* thrown into the seas each year by petroleum vessels. To these must be added waste from other vessels (cleansing of tanks and bunkers) natural discharges, oil lost in accidents (shipwrecks, damage, underwater drilling, leakage or breaks in pipes) and that collected by rain water in the atmosphere and thrown back into the oceans (products from industrial chimney stacks which have not been burnt up and from road vehicles).[17] [18] In internal navigation, hydrocarbide waste is usually discharged into the water courses. Pollution occurring

[14] *Economics of Welfare* London 1920.

[15] See Gordon Rattray Taylor (idem) *Le Jugement dernier peut arriver demain.*

[16] Cf. J.A Ternisien *Précis général des nuisances*, Environnement et Nuisances, Paris 1971, p. 94 et seq.

[17] Cf. on this subject the study of *Ocean American Shipping Services* (quoted by "Enterprise", no. 856–9 February 1972 (p. 55).

[18] According to the Belgian review *L'Homme et la Nature* (no. 1 – 1971), English oceanic laboratories have established that the North Sea is now being seriously polluted in increasingly large areas.

from domestic sewers and from waste waters of industry is also apparent. Lakes and rivers of all sizes use vast quantities of water and subsequently release the discarded part, often in a polluted state or at a high temperature. Agriculture has taken a place among the agents of pollution specifically through the wide use of pesticides, herbicides and fertilisers. Some of these and many other products flow into the waters.[19] The use of detergents, which leads to the appearance of scum on water courses downstream of large urban centres or factories, is now spreading throughout the industrialised world. Thermal pollution through waters used for cooling in power stations becomes a matter for concern. The degree of heat given out is such that the limits of temperature compatible with acquatic life may be quickly reached when it is a matter of very high units. In mentioning the matter of adulteration of water, we make no claim to judge the size or seriousness of the problem. We would only note that a valuable natural heritage is being damaged in this way. In addition, we often draw thoughtlessly on our reserves of deep water, which will have already given rise to a worrying dehydration. Our pure water requirements are increasing and will increase rapidly. Our consumption of water tends to increase under the influence of population expansion and the evolution of our life style, the degree of urbanisation and industrialisation.

In many countries, Belgium for example, a tendency towards a scarcity of fresh water is already becoming apparent. In future, water could become a relatively expensive consumable asset and production factor.[20] This is why the policies necessary for protection of water resources must be defined and applied in order to combat its pollution and to ensure optimum utilisation.

Regional or national initiatives cannot suffice in this sphere. As pure water is unequally apportioned this would lead to wastage in areas of abundance to the detriment of areas which are lacking. On the other hand, since pollution recognises no frontiers, it is absolutely vital that policies should be drawn up and action taken firstly at a community level and then on world scale. This is just as important for sea water as for fresh water.

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19 According to G.R. Taylor (idem p. 102–103 and 104).
We pass our time pouring thousands of products whose biological effects are for the most part unknown into the oceans and rivers which flow into them. This includes petroliferous products, chemical wastes, heavy metals, dry cleaning products, radio-active waste, chemical war gas and vesicants, detergents, pesticides and innumerable other groups of substances. In fact, almost everything that we throw away in liquid form reaches the sea, with a few rare exceptions which decompose rapidly, whilst much that we throw into the air also finishes up by falling into the sea. The number of the various substances which we now introduce into the sea is estimated to be half a million and in the great majority of cases we have not the least idea of their effect, since no one has ever tried to find out. "A much greater peril than that which might be produced by radio active waste. We have already reached the point where detectable quantities of radio-activity are to be found in a cask of sea water taken from any one spot on the globe." E.D. Goldberg announced in 1968 at the meeting of the AAAS (American Association for the Advancement of Sciences): "Radio-active substances are found in all the oceans and in all organisms of the marine biosphere". Many other authors have made similar observations: cfr. in particular L. Gérardin (op. cit.) p. 62 et seq.

20 Some reckon that water requirements will have doubled within twenty years and that unless enormous investments are made water factories (desalination of sea water) will not be sufficient to overcome forecast deficiencies.

(b) It has been estimated that the concentration of carbon dioxide in the atmosphere, which was in the region of 290 parts per million a century ago, could increase to 375-400 parts by the year 2000.[21] Combustion processes give off fine particles of sulphur dioxide, nitrogen oxides, and carbon oxides.[22] To these are added a mass of dusts, sulphur compounds such as sulphur anhydrides, nitrogen acid, organic compounds and fluorines given off by certain industries or the burning of waste.

The ever-increasing expansion of road vehicles and traffic[23] contributes to the pollution of air, with carbon oxides, organic compounds, nitrogen oxides and smoke and even further with harmful additive waste. In their field, sonic aeroplanes, which are increasing in number, aggravate phonic and air pollution. Careful attention must also be paid to fall-out, not only of radio-active particles but also of lead, cadmium, zinc, mercury and, tomorrow, of other metals which are coming increasingly into general use.

These despoliations are estimated to have reached such an alarming point that the former Secretary General at the UN, U Thant, has launched an appeal for us to face up to what he has called "a collective suicide which although slower is as relentless as a war". In fact, international action would be necessary as much to measure the situation and its dangers scientifically as to guard against them.

(c) Land is poisoned especially by excessive use of certain fertilisers and synthetic pesticides and by the fall-out of wastes from the air. In addition, it is feared that the food-cycle may be threatened by noxious substances, such as mercury, lead, cadmium, DDT and other chemical compounds.

On the other hand, the increase of articles sold in "disposable" and "non-returnable" packaging gives rise to a proliferation of refuse and wastes, many of which are not destroyed or are even decomposable.[24] Since products of the earth are often transported far afield, and man's movements are becoming more generalised, crossing frontiers, its protection is not only of interest to national governments. It should also be assured at an international level.

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[21] C. Starr *Energy and Power*, Scientific American, September 1971 p. 43.

[22] Coal, "fuel" and petrol being, by their composition of natural gas, the most pollutive, certain American towns such as Los Angeles, Chicago and New York, have set up communal control centres, in order to force certain coal and crude oil users to change over to natural gas, when the rate of atmospheric pollution becomes too high. In other countries such as Great Britain certain "smokeless zones" have already been decreed (by the "Clean Air" Act of 1956). Such measures have brought excellent results but they still remain disparate and partial.

[23] Cf. notably on this subject G.R. Taylor (idem) Chapter *Expirez n'inspirez pas!* (Breathe out, do not breathe in!).

[24] On this subject it has been calculated that the proliferation of refuse increases at the geometric rate of more than 10% per year.

V—THE UTILISATION OF SPACE

Demographic and industrial evolution reduce the free space within the Community, particularly in densely populated regions where activities and infrastructures are in general most highly concentrated. The accumulation of factories, buildings, "terrils" roadways, pipelines and cables either old or modern, is the outcome of an evolution which has occurred, sometimes gradually and at times in spurts, but generally without any unified concepts. Certain zones which were once active become or remain despoiled although new industries may have partially supplanted those which have fallen into disuse in the area. In fact, public intervention in the utilisation of space and land management is relatively recent and, as a rule, still disparate, compartmented and insufficient. Since the last world war, serious preoccupation concerning the regional balance of development and the worries caused by work in proximity to the more densely populated areas, have led to an unorganised swarm of infrastructures and economic activities. In certain regions numerous communities already possess or have in preparation zones of attraction for industry. The dispersal of such initiatives is very costly because it produces a consequential multiplication of investment expenditure.[25] In addition, such dispersal means the utilisation of more space than necessary for the conversion or optimum utilisation of surfaces already built on and it denaturalises the countryside. In certain very industrial regions, forested or agricultural zones thus gradually take on the appearance of large agglomerations still scattered with pockets of green space. In others, the natural sites are intersected by roadways, railways, canals, factories or houses, often without any regard to the ecological consequences of these investments and without any attempt to unify designs in architecture. Apart from the aesthetic disadvantages of this evolution, socio-psychologists stress that space which is broken up no longer has the same restful properties for man as wide open expanses, protected from noise and din as far as the eye can see. Paradoxically, this desire for calm spaces leads to their destruction, in relation to the increase of the standard of living, development of leisure activities and urban population density. In fact, more and more town dwellers set up residence in belts round the edge or else establish secondary residences at a distance. The methods of consumption of nature and the destruction of natural areas are thus accentuated. The disorderly invasion of space also aggravates the traffic problems between industrial zones, between home and work, between home and places of relaxation and leisure activities. Traffic congestion and accidents are on the increase, especially during rush hours and at weekends. On the other hand, the transportation of goods becomes more costly, mainly by reason of stopping time, accidents and increasing insurance costs. In many sectors (for example, those where many points of sale

25 Cf. specially on this subject A. Marchal – *Système et Structures Economiques* p. 670 – IV-edition. P.U.F. 1959 "... regional development policy .. and this is the first point – if it wishes to be effective, must not be limited to peppering the expanse of a region with subsidies scattered at the whim of requirements or influences. Such a policy would only end in swallowing up enormous sums at no profit. In the second place, the poles of growth must be planted with the encouragement of the public powers."

have been installed), the improvement of productivity at the manufacturing stage is completely negated by higher distribution costs, to such an extent that prices are forced to rise.

Without doubt, public powers do endeavour to deal with these problems, especially by the construction of motorways which avoid towns, multilevel cross-roads, bridges and tunnels. Often, however, these partial remedies have only a temporary effect and only succeed in the end in transferring the difficulties or producing others.

For example, hypermarkets and shopping centres are installed within reach of towns and motorways. This produces new utilisation of space which destroys the sites and also new causes of congestion or traffic jams on the motorways. The rapid saturation of many infrastructures is an indication of this

In these conditions, it is no longer reasonable to hope that partial, marginal and uncoordinated solutions will be adequate to solve correctly the problems posed in the utilisation of space.

Without wishing to specify and propose programmes here,[26] we would suggest that henceforth infrastructures and development should be conceived within the framework of a policy of space which takes into account economic, social, aesthetic and human aspects. In this respect, one of the first major preoccupations must be that of limiting the consumption of empty spaces and natural sites caused by disordered implantations. For example, instead of installing industrial zones in many neighbouring communities, would it not be preferable to go for centralised zonings? Judiciously implanted, such central zones could become the development pole for a whole region. By the elimination of duplications, and overprovisioning, the cost of investment required would not be as high as that caused by fragmented and isolated initiatives. Furthermore, the implantation of such zones could be more rational, more economical and more social with proper management, especially of internal traffic, access roads and facilities which are necessary in order to make them viable.

Thinking along these lines, certain zones could be specialised in order to accommodate particular industries. When these are pollutive it would be less costly to cure the influences by one sole action, even by communal installations.

[26] Some authors, organisms or groups have formulated some· cf especially Ph Saint Marc (idem) p. 215 et seq; E. Goldsmith & R. Allen, editors of the manifesto *A Pledge for Survival* published by the British review *The Ecologist* (distributed with approval of eminent members of the Royal Society); concerning pollution: *Seven methods of anti-pollution Policy* – Pr. J. Pen, Economic quarterly review of the Amsterdam-Rotterdam Bank, March 1971; J Temisien (idem) works of O M.S., of the Economic Commission for Europe of the U.N., of the Council of Europe, of the Communities Commission, of the OECD.

In this area, as in others already mentioned, the international approach would appear to become increasingly necessary.[27] Undoubtedly this should ideally be reconciled with the powerful regionalist aspirations which are evident in Western Europe. But this does not alter the fact that a regrouping is necessary of the functions of land management, protection of the natural medium and the quality of life on a higher political level. On the other hand, political selections cannot be improvised. A thorough technical study must always be made first, in order to clarify, quantify and measure the options and their multiple implications. The competent technical institution must ensure that the scientific proposals are of unquestionable repute and must conduct its work thoroughly.[28]

VI—FINANCING OF INFRASTRUCTURES

(a) A major objective: the limitation of costs by control of optimum expenditure

This financing poses the problem not only of allocation of public resources and of the level of total public expenditure in relation to the GNP but also of optimum utilisation of public funds.

The proportion of public expenditure in the GNP has grown recently in all the countries of the Community:

Year	Germany	France	Italy	Nether-lands	Belgium	Luxem-bourg
1957	38.3	38.7	30.2	39.4	28.7	30.5
1967	42.9	41.3	36.2	48.0	39.3	37.3

Source: E.E.C. – L'évolution des finances publiques dans les Etats membres de la Communauté Européenne 1957 à 1967 – (1970 no. 8)

With particular regard to the development of public responsibilities, this tendency will probably be maintained, in certain countries at least. In Belgium, for example, it is forecast that the proportion of public expenditure in relation to the GNP will go from 40.6 % in 1968 to 47.4 % in 1985. This escalation of budgets leads us to pay particular attention to the organisation, efficiency and, in an everchanging world, the adaptability of the administration. Badly allocated, or employed, public expenditure would have an increasingly heavier social cost and become increasingly unbearable.

[27] An international conference on the human environment will meet in Stockholm in June 1972, at the investigation of the U.N. – Member countries have been invited to present their reports there.

[28] Cf. especially on this subject H. Simonet: *La Gauche et la Société industrielle*, Ed. Marabout, Paris et Verviers (p. 106 et seq.)

In democracy, these aspects must have a growing political impact. Disregarding all ideologies, citizens, their elected representatives, organisations representing the directly productive and work sectors, will surely be inclined to require public powers to make optimum use of accrued financial resources which are obtained from them. It would seem that one may presume this. Besides, it has been pointed out that the means of covering infrastructure expenditure without producing chaos were limited and that it was necessary to supply simultaneous finance for directly productive equipments required for development.

In these conditions, the search for optimum use of resources allocated to infrastructures must become a major objective, not only in intent but also in reality.

In order to make progress towards this objective, reconciling it at the same time with the protection of nature and the life medium, revisions and innovations are necessary under several headings

(1) Firstly, long term social objectives, development policies and programmes should be redefined and clarified[29], also the means of carrying them out. To this end, the future and the options (possible, foreseeable and preferable) should be prepared and studied by the administrations or offices responsible for drawing up these programmes with the scientific proposals required, especially those of "futurity" centres.
Such work has been undertaken in certain countries. Such centres already exist. It would be desirable to assemble and coordinate this work and activity in the initial stages through community organs.
On the other hand, the costs and advantages, direct and indirect, of the options or the proposals should be more thoroughly looked into, which is often not the case.[30]

(2) Alvin Toffler has written that "cut off from the future, the citizen becomes a political eunuch". He proposes "the democratisation of methods by going to the people". In order to associate this with the necessary choices with regard to the future, he suggests that "assemblies for the future of society" should be created.
These assemblies would be representative bodies, not only geographic but also social: industry, the working world, the arts, women, ethnic and religious groups, students.[31] Their work would be prepared by teams of technicians with a view to presenting all possible alternatives and to orienting the choices, in relation specifically to costs. Although such a proposal may appear, at first glance, unrealistic, in so far as the present

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[29] Especially, by the revision, suggested previously, of traditional national accounting methods and economic calculation systems, by establishing means of measuring public welfare with appropriate indicators.

[30] Without such thoroughness, the financial costs often result much heavier than those foreseen in the original outline plan, which thus compromises the possibilities of future action.

[31] In this spirit, these assemblies, whose participants would be constantly reviewed and renewed, would serve the social body both as a jury for the great political choices and as advisers for the future.

functioning of democratic regimes is concerned, procedures or organs, either consultative in certain of these milieux, or for joint action on development policy, do exist in the countries of the Community, as well as on the higher Community level. Nevertheless, their competences differ and their work is often confined to short and medium term projects or programmes. It would be possible[32] and desirable to introduce a new dimension: that of future prospects or futurity, into the functions of these consultative or joint action organs; to harmonise their statutes, making them as representative as possible of the regions and the constituent elements of the social body and also to improve the scientific basis of their work.

(3) The scientific, technological and industrial revolutions have forced humanity to assume responsibility for its future, because henceforward it is in a position to fashion it and because these revolutions pose just as much of a threat as they afford any benefits.

But humanity's vision, behaviour, methods and institutions have hardly been adapted to this situation, although it is true to say that it is a new one in its history.

Europe, like the world, is still divided into more or less autonomous parcels, with preoccupations and policies often singular, isolated and scattered, even contradictory or antagonistic.

With the exception of a few cases of community action and coordination, the problems of infrastructure continue to be broached on levels and in contexts which are too exclusively nationalist or even regionalist or local. We have established that, as a result, there are inadequacies, extra charges and wastages, mainly due to duplication, escalation of values and inadequate dimensions.

The equipment policy practised in Europe is one illustration of this among others. The majority of ports are equipped for container traffic, which brings an under-utilisation of installations. Some of them compete to attract vessels of greater and greater tonnage, so that previous costly investments lose their utility before their normal redemption.

Numerous cases of this nature could be quoted, for example, in the sphere of pipelines and in countries where regional or local compensation of infrastructures expenditure is practised, without integrating it into the total long term plan scientifically prepared and coordinated with projects of neighbouring nations.

(4) Such a lack of provisions for the future, accentuated by the limitation of financial means, leads to the installation of infrastructures of inadequate dimensions or of too traditional concept. Consequently, they are often rapidly overtaken by technical, economic, social, cultural or sociological evolution. This is the case for example with river, road, rail and air links, or furthermore for universities, vocational schools and hospitals.

[32] As L. Gérardin wrote ("Les Futurs Possibles") – Hachette 1971, p. 162: "Of course, the study of futurity is not planning. But the two together form a whole: the first flowing naturally into the second."

False cost economies, which in reality result in losses, add thus to the wastage, caused by dispersion of initiatives and a lack of joint action and coordination.[33]

(5) Careful withdrawal of investments at the correct time would provide economies with additional returns. Infrastructures which have become useless should be abolished, reconverted or sold. This is particularly the case for airfields or disused military ground, industrial zones which are little or badly used and decayed, unoccupied or unadaptable buildings. In so far as such investment withdrawals allow the recuperation of resources and the reduction of function expenses, new equipment could be put in its place without extra charges.

(6) The staggering of public investments is also of consequence from the point of view of our present considerations. By their multiplicative effect, these investments stimulate expansion. They produce employment, revenue for nations and returns for public powers. This is why investment policy is used as an instrument of contingency regulation. However, it is important to be extra careful in handling it of its repercussion on costs, which is often not the case. Indeed, these may be made heavier by the fractioning or delay in execution of the programmes.

(7) In order to restrict the cost of infrastructures and to integrate the conception into a development policy based on the protection of the environment, life medium and the quality of life, it would be necessary to redefine the ultimate objective, missions and often the organisation of enterprises, administrations and public services. This necessity is increasingly *realised and stressed*[34] *The missions of enterprise* no longer lead solely to the objective of profitability but extend to cover elements such as participation in decisions and results, work satisfaction, scale or remunerations, information, responsibilities towards the community of implantation or the surrounding environment. Business men are induced *to construct and direct an innovating organisation.*[35] *As for public* administrations and services, the search for efficiency, creativity and the quality of benefits, tends to be more and more generally asserted in relation to the escalation of fiscal and parafiscal charges. On the other hand, state employees no longer consider security of employment or public service as *sufficiently satisfactory incentives.*

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[33] It is interesting to recall, in this respect, the principle of maximisation of social earnings (cf R.H. Haveman, *The Economics of the Public Sector*, New York-London-Toronto, p. 61). According to this principle, the public sector should increase taxes and public expenditure as long as the marginal social utility exceeds the marginal social disutility due to the transfer by tax, of a monetary unit from the private to the public sector. On the other hand, the allocation of public expenditure to the various categories of expenditure and programmes should, according to a reasoning of this nature, result in an equalisation of marginal utility of the monetary unit spent on each programme

[34] Cf. specially B. Cazes, *Explorer l'Avenir – Informations et Documents*, (p. 31) – December 1971. H. Janne, *Le Temps du* the courage ... to imagine collective institutions of a new type, conceived with two goals in mind on the one hand, to accept loyally that part founded on criticisms of the public services, regarding their excessive costs per unit, their deficits and their relative inefficiency, their rigidity, their lack of control and the criticable treatment of users; on the other hand, to prepare the ground thus for the application of a more direct and more participant democracy.

[35] Cf. particularly on the subject Peter Drucker, *La Grande Mutation* p. 69 et seq – Ed d'Organisation, Paris 1970.

One of the possible ways of reform would be to accentuate the decentralisation of certain functions of public interest, specifically in the sphere of studies and realisation and management of infrastructures. Specialised organs are more supple and adaptable. Their intervention could be more speedy and less costly. Their financing could be facilitated by the personalisation of their mission. It could be more easily foreseen that they should receive payment from the users for their services. A more general use of new instruments and methods would also appear recommendable: for example, "The Planning, Programming, Budgeting System" (PPBS)[36] or "Rationalisation of Budgetary Choices" (Rationalisation des Choix Budgetaires RCB),[37] the "Cost Benefit Analyses", the use of econometric models,[38] the Delphi method[39] and the so-called "scenario".
Besides, systematic and objective information of opinion in particular through television, radio and press, would appear to be increasingly useful.

(8) The application, albeit progressive, of the various measures cited here, would allow the limitation of public expenditure both in investment and funtioning. It would also contribute, we feel, to improvement of the image of public powers, administrations and services. These are the objectives of primary importance.

The requirements and means of financing

(a) *Expenditure on infrastructure will grow in the European nations*

In public budgets, the expenditure on infrastructure exerts and will exert an increasingly strong pressure in regard to the multiplication and growing cost of equipment in particular and to the rise in exploitation costs.[40] This pressure is closely allied to the speed of evolution of technical progress, industrial development, personal income and style of life. The economic viability of many equipments tends to become increasingly shorter, whilst their users become more and more demanding. Besides, the cost of many collective equipments is accentuated by inflationist tendencies since, in the scheme of things, constructions and buildings are, in the final analysis, work and land. This is notably why we have insisted on the necessity of searching for an optimum infrastructure policy in order to limit expenditure. But, even supposing that it is possible to move fairly rapidly towards this goal, it remains that the volume of equipments to be financed will increase substantially in the years to come. The only additional charges for an indispensable policy of protection of the environment and of nature will tend to increase public budgets considerably. This evolution

[36] Born in the United States and now used in Europe.
[37] First applied in France.
[38] As, for example, those used by the economists of the American Treasury, comprising variations and fruits of their experience.
[39] Used by the Rand Corporation, which consists of gathering advice from experts and thence forming conclusions.
[40] In relation particularly to the increase of remunerations and the reduction of working time.

will pose problems, all the more thorny, since the expense of transfer of public power to the direct benefit of individuals and enterprises has increased by much more than the disbursements of collective interest, which is indirectly to their benefit. Thus, the favourable effect of these disbursements is less easily discerned; they are therefore less popular. On the other hand, it is easier for Government and Parliaments to obtain allocation of public funds to national, regional or local ends than to longer term projects of international interest, even if the latter are more necessary.

(b) *Expenditure on infrastructure in the countries of the Community could be higher than forecast*

We have shown that new capital expenditure and functions will be unavoidable if we are to protect the environment and to manage lands and spaces.

Sweden proposes for example to allocate 8 to 10% of her gross national product to this between now and 1980. The United States put this figure between 5 and 6%.[41]

As for member countries of the EEC, they do not forecast, in general, an increase of more than 2 to 3%.[42] However, the requirements of the Community are no less than those of the other countries cited. From this we can deduce that the problem here is not yet appreciated in total clarity and there are even those who hesitate to present it in its full extent and seriousness due to other preoccupations. One may well doubt that this position may be maintained.

(c) *The problems of financing probably cannot in future be resolved through the usual channels*

Since supplementary expenses appear thus as unavoidable, one must ask how we are to finance them. Overall, they should be covered by the taxation policy, by savings or by credit, internal or external.[43]

(1) Credit can only be considered as an occasional or marginal contribution

We would point out straight away that recourse to short term debts can only, in our opinion, be considered as an occasional or marginal contribution towards the financing of investments and *a fortiori* current public expenditure. To allow the contrary, in economically and technically developed countries would be to accept the imposition of inflation by continuous monetary injections on top of the various forms of cost inflation already hardly bearable without chaos.

There remains fiscal policy and savings.

[41] Cf particularly: *La Tribune d'Allemagne* (no 16) December 1971 p. 8.
[42] According to the services of the Commission
[43] In so far as the price of services rendered is not payed by the users, as can be forecast in certain cases.

(2) Foundations and application of taxation policy should be reviewed

The frontiers of fiscal policy are not indefinitely expandable. In so far as personal tax is concerned, the taxpayers revolt, the fiscal basis is gradually eroded, capital is exported,[44] and the cost of controls increases when certain limits are exceeded. Those receiving receipts from earnings and who consider the net proceeds from these try to pass on at the very least a part of the additional taxes to their employers, if they are not to lose their initiative or become less productive.[45] Excessive taxation thus accentuates cost inflation or reduces the productivity of the system. In so far as tax on companies and enterprises is concerned, once certain thresholds have been passed, this threatens the faculties of adaptation, innovation and growth. Indeed, if public interventions and subsidies are not generalised, these faculties depend in the final analysis on the net cash flow, after deduction of taxes. As for so called indirect taxes, levied whenever possible on the transfer of goods or services, these are borne in the end, for the most part, by the consumers. Although these must be differentiated for social reasons, their increase thus causes a rise in the cost of living. In these conditions, it is doubtful whether the increase of fiscal charges alone can resolve the problems of financing the infrastructures which now face us. This does not mean to say that improvements and, above all, innovations must not be studied. Indeed, many tax devices have been conceived on the basis of situations which are out of date today or soon to become so and, much more rarely in the futurist context. So, the reviewing of certain tax concepts and their application could improve the yield, acceptance and advantageous effects of taxes. In particular, the measures against frauds and tax evasions would be reinforced by concerted international attitudes and action. In the absence of these, the most vigilant nations risk being penalised when capital is removed or centres of profit or initiative transferred.[46] On the other hand, methods of establishment, collection and control of taxes should be brought into line with the objectives of the development policy and amended with a view to reducing, notably by simplifications; the levy costs.[47] For example, the fiscal policy could contribute to the policy of protection of the life medium and improvement of life quality. Concerning pollution, one principle is tending to become increasingly stressed: "the polluter must become the payer." The application of this principle could take on multiple means.

[44] Notably by means of the numerous "tax havens" which exist in the world.

[45] L. Gérardin (idem p. 207 et seq) on this subject mentions the failure of the "Swedish model", which he considers is becoming increasingly pronounced. He wonders if the true cause of this failure is not a violent reaction of the white collar workers: "The Swedish Confederation of Intellectual workers has recently demanded an immediate increase of 23% to compensate for inflation – To compensate also for the new increases in taxation (Sweden is the country with the highest indirect taxation in the world)."

[46] It is well known that multinational enterprises and those who have foreign subsidiaries, can, by various mean which are often legal, make part of their profits appear in the place where the tax regime is the most favourable. The same can apply for the many enterprises which deal with foreign countries.

[47] This is an enormous task. But it is becoming vital that it is undertaken. F. Bloch-Lainé has drawn up some suggestions in this respect which are especially worthy of interest (in *Pour une réforme de l'Entreprise*, p. 127 – Ed. du Seuil.)

Private individuals, public services and enterprises would be forced or induced, mainly by fiscal means, to avoid destruction, damage and pollution, or at the very least, bring them to tolerable proportions.[48]

Nevertheless, unless they are harmonised at international level, measures of this order would create distortions in competitive conditions and would affect commercial exchanges as much as strong liaisons between enterprises in the countries where they are adopted. Indeed, such dispositions would bring additional charges and investments which are not directly profitable and would cause an increase in costs.[49]

Countries which instigate avant garde measures in isolation, in the general interest, would thus run the risk of weakening, by this very move, the competitive position of their enterprises, that is to say that they would jeopardize the level of employment and of life of their population.

(3) Preparations must be made for the transitions towards a new society

On a more general scale, the passage of a productivist society still too attached to the quantitative aspects, to a humanist society, with more qualitative goals, will produce such upheavals that the transitions must be studied and prepared. Conversions will be necessary both in infrastructure and directly productive investments. Often, these conversions will have to be made simultaneously. The financial structure is already too weak in many European enterprises and their *net profitability has become too marginal or vulnerable for them to be in a* position to obtain enough additional capital of their own by self-finance or by the traditional mechanisms of the finance market. Unless they are able to make use of new facilities, these enterprises will hardly be able to finance the conversions they desire.

On the other hand, it will be necessary to prepare the ordered development of branches of industry and services whose competition will be necessary for the protection of the environment, elimination of refuse, reduction of pollution, purification of water or its production. Apart from direct public aid, which could become unavoidable in certain cases, in this sphere too one must endeavour to find the optimum, both to limit collective costs and with a view to efficiency. To this end, one could imagine, firstly, the institution of a "European industrial fund" to prepare the policy to follow and orientate by stimuli or by financial contributions, the decisions of enterprises into a direction which coincides with the priority objectives of this policy.[50] Again, one could

[48] Ph. St. Marc (idem p 274 et seq) proposes a tax on damages and on the utilisation of green spaces, also an "urban biological tax" (with a view to slowing down excess urbanisation). He expresses the opinion that, in order to stop polluters from polluting, the pollution dues should be at least equal to the cost of purifying.

[49] Without it always being possible or desirable to reflect these increases in cost.

[50] Various steps have been taken in this connection on a national or regional scale but of a scattered nature The creation of a community organ would allow the reinforcement, harmonisation and coordination of these measures.

study the creation, on an EEC level, of an organ responsible for the preparation of a policy of infrastructure and environment and the inspiration, harmonisation and coordination of national and regional actions in these spheres.

In order to facilitate and accelerate the conversions of industry and services it would also be necessary to extend the role and amplify the means of investment or development of public interest by companies or institutes, and such bodies already exist in several European countries. These companies or institutes could be particularly useful to support enterprise's commercial risks —their intervention entails multiplicative effects and their policy could be easily aligned with that of public powers. The need, which we have stressed, for the creation of such an investment company or institute on a European level, to stimulate or revive the necessary conversions seems equally increasingly obvious, for the same reasons.[51]

(4) It would be wise to foresee a lack of savings funds with regard to investment requirements, and, hence, to endeavour to find new means of financing

Is it wise to forecast that sufficient savings could be mobilised by traditional methods, in order to complete the financing of infrastructure and equipment requirements? We do not think so.

We know that savings can come from public administrations, enterprises or households.

So, one can hardly foresee the formation of large savings by public administrations. Indeed, their establishment is held back or prevented by numerous factors such as the extension of their present tasks and their requirements, pressures in view of social transfers or public aid, and the frontiers of fiscal expansion.

On the other hand, the net savings faculties of enterprises are a function of their profitability margins. Now, if these margins remain high in certain branches, on the other hand, they become slight and fluctuating in many others. Besides, they could be further restricted in many cases by a "Scissor effect" which is the result of an increase of production costs in parallel[52] with a ceiling on sales prices.[53] It is doubtful whether this restriction can always be

[51] Cf. notably *Le Financement de la Politique Industrielle en Europe*, report at the Conference at the European Centre for Public Enterprise (CEEP), Rome, May 1971 (*L'Echo de la Bourse* – 3 June 1971) and *Proposition de créer une société européenne d'investissement* (Revue de la Banque Bruxelles 4 April, 1968 – no. 4) M. Petrilli, President of the IRI specifically expressed a similar suggestion.

[52] Under the effect of a tendency to increases of wages and social benefits (in parallel with a reduction in the working hours), taxes, primary materials and power, forecast expenditure for the protection of the natural environment and for improving the conditions and value of work.

[53] By virtue notably of the accentuation of international competition and the obligations of the price policy

compensated by innovations, productivity improvements or by external or scaled economies. Besides, many European enterprises have financed their investments by taking loans on an extreme scale rather than increasing their own funds.[54]

These factors explain how the State and enterprises already today have recourse in large measure to external financing to ensure their investments. Nothing now would seem to indicate that it will be otherwise tomorrow.

Regarding savings of households, these have reached a relatively high level in Europe. It remains possible that this could expand in relation to the increase of personal incomes and the broadening of their distribution. However, their formation could also be held back by several factors such as monetary erosion, extension of leisure activities, multiplication of available goods and services, desire for improved welfare, facilities offered by personal credit and financing by the deferred payments system.

Under these conditions, it is definitely advisable to carry out a policy of encouragement and stimulation of savings, mainly by tax advantages.[55] But it is doubtful whether this would be sufficient to mobilise the complementary capital necessary for setting up infrastructure and directly productive investments.

Hence, in this sphere too, new solutions must be looked for. Amongst these, the study of a legal system of savings could be made. Of what, for example, would such a system consist?[56] As a complement to direct taxes, levies would be made on certain incomes and put to productive savings accounts of low interest. Capital thus formed would be put principally to the financing of institutions of public interest and priority investment projects The accounts could be converted in determined proportions and conditions, into shares or debentures (convertible or non-convertible) in enterprises or institutions of community interest. Other forms of mobilisation of these accounts could also be envisaged. Without doubt, such a suggestion which would recall precedents of forced savings would provoke objections. If we believe, however, that it must be put forward, it is because a realistic diagnosis of the prospects for savings and investment would appear to lead to a choice between certain opinions: inflation, excessive rise in taxation, blockage of development and of necessary conversions or the search for new solutions, one of which would be legal

[54] By virtue notably of fiscal advantages which result from loan financing and the difficulty of obtaining risk capital

[55] This policy has had favourable results, for example in Germany.

[56] *Cf. previously quoted report at the Congress of the* CEEP (May 1971)

savings. Amongst these options, that of legal savings would appear to be perhaps the least constraintive.[57]

VII—FINAL CONSIDERATIONS

In stressing so forcefully the problems of conceptions, policy and financing, posed by the infrastructures and protection of the environment in the Community, we have laid no claim to originality. Perhaps we may have been able to contribute in some way, however, to a partial illumination, using the facts and information which we have been able to glean.

Neither have we attempted to predict the future, or even suggest that we would tend to such a prediction. Sharing the belief that one must endeavour to forecast the future in a realistic fashion, we have only wished to show certain grounds for organising ourselves in such a fashion as to arrive there, whilst constantly keeping in mind the theories and future plans in the light of evolutions observed and the resultant new tendencies. Is it not important, in fact, to create conditions conducive to a totally conscious and prepared path towards a humanist society, reconciling growth objectives with those of protection of the environment, protection of life medium and improvement of the quality of life?

Would we not prefer to invent the future than to suffer it? The time is no longer, always supposing that it has ever existed, when it is acceptable to "approach the future backwards" as expressed by Paul Valéry. The times of nationalist, private and scattered solutions to the problems of development and infrastructure have also run their full course. Regional aspirations must be reconciled with international joint action, cooperation and solidarity which are becoming more necessary than ever. With regard to public expenditure, both in investment and functions, its expansion makes it necessary for us to endeavour to find solutions which will produce the optimum results. In order to reach this point, there must be strong but democratic States, served by competent administrations, and by a network of efficient public institutions. Louis Armand stressed, and rightly that "men are worn down to no purpose in weak structures. Their efficiency is, on the other hand, increased tenfold by strong structures."[58] This need for strengthening of States does not in the least

[57] In the course of a conversation in Paris, a similar proposal, although of a much stricter nature, was formulated by one of the directors of a large American bank. This proposal was the following: any increase in wages, salaries, dividends or other income beyond a certain percentage would automatically be put into a savings fund. This fund would pay interest to those whose incomes had been withheld. Such a system would reduce the incentive to look for and to pay excessive salary increases and would procure a new source of capital for the financing of public investments in such spheres as housing, transport and the control of pollution.
(Proposition by W. Butler, Vice-President of Chase Manhattan Bank, cited by the President H. Patterson, during the international financial forum organised by this Bank in Paris, 11th March, 1971.)

[58] *Simples Propos* (p. 180) – Fayart, 1968.

contradict that of the delegation of missions and powers required of international organs. On the contrary, the capacity of each would thus be reinforced.

By forcing ourselves to make specific suggestions, we have only wished to show that new channels can and must be found within the framework of a democratic regime, which remains, in our opinion, valuable, and above all capable of perfection, despite the clumsiness and defects which are being increasingly criticised. The forms of democracy are multiple, flexible and can be improved. On the other hand, we cannot see any alternative to this improvement save decadence or some disguised form of dictatorship.

At the end of his work on "Les Futurs Possibles" (The Possible Futures) L. Gérardin reminds us of the reply of Ralph Nader to the reporter Henry Brandon who said to him—"Many young people no longer believe in reforms. They want to destroy the system in order to create a new one." His reply was: "I myself maintain that the democratic system is a good framework to work in. Democracy does not mean 'status quo', but people must understand how the machine functions, the damage which it causes them and the need to get it into working order." He then proposed that we should "question ourselves, and look constructively at the creative rebuilding of the future." This is what we have attempted here and what we too propose. The formation and enlargening of the European economic community has given us the opportunity to fashion, jointly and democratically, our future. Let us not allow such a precious chance to slip through our fingers and bear in mind, as also recalled by Paul Valéry, that "civilisation are mortal" In grasping this opportunity, let us be capable of reaping the full value of our common interest, and extending our horizons beyond parochialism, private interests or situations and generally accepted cliché ideologies or ideas.

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FINANCING INFRASTRUCTURES FOR A HARMONIOUS DEVELOPMENT OF THE COMMUNITY(*)

B. ARMATO

Proposition

To our way of thinking, the problem of financing infrastructures if it has objective limits in a poor community, has only a political meaning in rich communities such as those of Western Europe. In West European zones where there are huge movements of speculative capital which does not find or does not wish to find productive uses, where there is a constant movement of capital towards other countries, the problem of financing the building of structures and plants to improve the standard of living is eminently a political one. It is at political level, in the most relevant meaning of the term, that resources are parcelled out for various uses on the basis of the relation of strength established amongst the different strata of the Community. In this report we, therefore, propose to deal with the main topics of conflict of interests which have been stimulated in Western Europe, a conflict in recent times which has been based on the imbalance created through obsolescence of national authorities and of that minimum of economic democracy which succeeded in taking shape (democratic programmes, parliamentary control, syndical action, etc.) between the Community and the productive world, between social objectives and industrial development.

I—THE PROBLEM OF INFRASTRUCTURES AND THE GENERAL POLITICAL CONTEST IN THE EEC

1. The problem of definition

The concept of social infrastructure in any of the definitions by sociologists and economists, is neutral on the question of conflict of interests. They do not help us, therefore, to identify the field of action nor the results of this opposition which we think has been outlined in European society.

For this reason, more is required than only an abstract and inclusive concept and a clear distinction is needed of infrastructures on the basis of objectives pursued, even if this distinction can have but a rather vague outline. However, it will be said that even a distinction based on the social or economic objectives sought needs examination at the level of the interests pursued. One can distinguish:

(*) Translated from the Italian

(i) infrastructures with an economic purpose, necessary to the activities of enterprises (energy, transport, etc.);
(ii) infrastructures of a social-cultural character, which serve the physical, intellectual and moral well-being of the population (health, homes, education, culture, organization of free time);
(iii) infrastructures with an administration purpose, (state apparatus, defence, administration of law); there are still some margins of ambiguity under this heading.

Infrastructures of a social-cultural character could function as an answer to socially distorted needs. A school, for instance, could be directed exclusively towards increasing productivity. The building of houses for emigrants can serve to perpetuate the imbalance between regions of high productivity and the less developed ones with serious inconvenience to all those involved (in departure and arrival zones) with this phenomenon.

On the other hand, infrastructures with an economic aim of stimulating a balanced development between various regions would answer efficiently the needs of European society. In spite of these margins of ambiguity, it seems to us that in order to characterize certain trends this distinction could be accepted.

2. Some considerations on the trend of the European integration process

In documents of the Community organs, mention is frequently made of the "Creation of an original civilization" as the fundamental objective of the process of economic integration. In truth, optimistic as the interpreters may be, it is difficult to find in the Treaty such generous intentions. From its reading, the illusion emerges rather of creating in the Europe of the twentieth century an area of economic liberalism where to the automatism of market forces would befall the task of achieving the aims of civilized progress. The Treaty does not provide for, nor does it ascribe to anyone, the authority to direct European development. The economic and social changes which it has produced have by now revealed how intolerable the situation is. With such background, we are not surprised if, in recent years, more concern has been shown to the problem of securing a maximum rate of expansion so as to recover productive gaps, rather than to the necessity of giving an impulse to objectives of social programme and to economic democratisation.

Apart from some dreamer who continued to propose the idea of an original development, it was all too evident that the objective to be reached was competitiveness with other developed areas in the capitalistic world, turning away anything that could harm this competitiveness.

In the Memorandum on industrial policy, for instance, can be seen how the financing of public expenditure through an increase of public debt is to be avoided in so far that it weakens the means of industrial financing by lessening the availability in the capital market.

The statement of the Memorandum means, therefore, containing public expenditure so as to free resources for industrial development. This is confirmed by the role that in such a contest is allocated to public enterprises and to the policy of public contracts, two factors which should ensure further support to industrial expansion, with a loss of public expenditure.

In the EEC the dualism industry-community has been solved in practice by making the first objectives prevail over the second, and also by taking advantage of the timorous vacuity in democratic control at European level. Paradoxically, in so doing, the same kind of development in the advanced areas of the Western world, whose competition should have been fought, have been proposed again. However, the preference given to spontaneous economic evolution produces in the limits of the relations of strength between productive powers an imbalance in favour of enterprises in contrast to social needs.

This produces in fact a concentration of political power in the productive structures and the burden of a constant passive adaptation by labour to the spontaneous evolution of economic structures. In essence, workers are called upon to make sacrifices in front of reduced economic activity, to face structural crisis, trade and sectoral restructurisation and to react by mass emigration to the attitude of securing the maximum profits realisable by territorial concentration of investments. The preferential character of access to accumulation by economic forces coupled to an uncontrolled phenomenon of concentrated territorial development are the cause and, simultaneously, the effect of an inability, definable as a system, to face at least parallel social infrastructure development.

Public expenditure which is capable of meeting objectively the needs of productive quantitative development but is unsuccessful in directing the qualitative choices limits itself in reality to the performance of a collateral function unable to supply even adequate answers to those same needs for a territorial planning now indispensible for the pursuit of present tendencies.

3. The political problem

In the course of time the tolerance of an advanced industrial society faced with this situation tends to diminish whether in factories, places of work or in the community, even if this does not occur uniformly in the various countries. The trend of this curve is undoubtedly determined by various historical, ideological and institutional factors. For instance, in European countries where organisations of workers actions were born and have grown, workers are far more sensitive to this problem of economic democratisation. Yet, institution and political organisations do not seem capable of expressing these requirements in a practical way.

The domination which economic groups exert on areas of communication of

the masses enables them to extol an ideology whose aim is "the extolling of economic liberalism and individual success to the detriment of collective aspects of social life, to the conditioning of individuals"[1] in their choices and their kind of comportment "in order to preserve power in the hand of a few minority groups". This is probably the most efficient force which allows the extraordinary capacity of adaptation of capitalism. It is in this way that are labelled, like symbols of success, the products destined to individual use: motor cars, domestic electric implements, etc. This ideology has two deep rooted aims: one economic, the continued demand for private consumption which permits an intensification in demand for such goods, strengthening current tendencies; the other political, the proposal that the present mode of development is the only possible and fair one. The phenomenon has thus an important influence either on finding oneself missing out in our society or on the possibility of its change.

In the end there is a missing perspective and structural adaptation to this new reality of modes of political constitutions which should rule the destiny of Western Europe. On the one hand, the democratic institutions founded on a national status are now old irons unable to control, except to a small extent, an economic development now of continental perspective at least.

On the other hand, even the few prospects which do exist at European and at national levels for guiding economic evolution are frustrated by the inconsistent and unsuccessful revival of institutions. All this leads European citizens to the firm belief that there are no alternatives, at least at short term, to the present situation.

In spite of these negative elements, from 1968 to this day, a real objection to this situation has developed; started in factories, it gained ground in the community and is supported by the revindication for a more ample economic democracy.

"The objection to this situation started in factories, as traditional aims of syndical action concerning wages above all and, therefore, the re-distribution of the enterprise profits, then were added revindications relative to rates, to qualifications, to work organisation in general and even to reinvestments. Thus, on the working side, started a new balance of power in the factory with a spread of always more varied negotiations which in short, could not prevent being transferred at community level where the imbalance in the relation of power society-industry was supported by uneasiness caused through stimulation of regional imbalance, through forced emigration, a want of infrastructure able to respond adequately to the phenomenon of urbanisation."

[1] CFDI – *Pour un socialisme démocratique* – P. 40.

4. New requirements and Community organisms

The events of May 1968 shook France considerably also the convictions of a large portion of European citizens, at the time in Community circles surprise was expressed at the small importance attached in this explosion of the European outlook theme, although many claims in those days put clearly into prominence the national crisis.

There is no doubt that from that moment, began a serious self-criticism on the way to proceed with the integration process even if it has remained hitherto on an intellectual plane or, at most, has remained in some document the practical application of which permits serious doubts to be raised.

In the document on Guidance for a Social Policy,[2] for instance, one first of all notices that at the initial phase in the process of integration, bar a few exceptions, "the improvement in standard of living and of work of labour to bring it on a par with progress" was generally mentioned as expected and attributed more "to the functioning of the Common Market which will favour the harmonization of social systems" than "from the expected procedure of the Treaty and the approximation of legislative, regulation and administration provision" (art. 117 EEC).

It is said moreover that "the open prospects for implementing an Economic and Monetary Union have changed the conditions of the problem. The necessary coherence between economic and social aspects of the integration process will impose itself always more. The want of simultaneousness in the realisation of economic and monetary aspects, on the one hand, and of the social ones of integration on the other, could compromise the success of the process set in motion".

To this end, three so called "major aims of society" are mentioned, i.e. full and better employment, a greater social justice and finally, a better standard of living "to be fulfilled not only by an improvement in working conditions in themselves but also through an efficient protection of the physical and psychological health of the individual against "perturbations" of different kinds, with the protection and promotion of natural environment and through improvement of setting-up conditions, a better satisfaction of social-cultural needs".

"Only in the measure in which the Economic and Monetary Union, with all its implications, will effectively contribute to an improvement in the living conditions and the well-being of all, will European integration secure the strong adhesion of the population, in particular, of the young generation which, in the building of the new Europe, seeks the realisation of a new society, conforming

[2] Preliminary guidance for a Community social policy. EEC, 17th March, 1971.

to its deep aspirations. This implies the implementation and strengthening of an economic and social democracy, taking a practical form either in the democratisation of economic and social structures or in the assertion of the autonomous role and responsibility of the social sector at Community level".

At this point, one understands that it is necessary to couple this theme to the economic development and to refer to the Third programme of medium term Economic Policy which states: "The economic policy of the Community cannot be limited to the aims of common objectives on the question of development and of stability. It acquires a full meaning in the contribution it makes to the improvement in living conditions: it must tend to raise the living standard and at the same time, to improve the qualitative conditions of existence; it must moreover contribute to a greater solidarity of the less favoured social classes."

"In order to better satisfy these needs, the greatest importance is to be attached to the correlation of economic and social evolutions. A balanced and sustained economic evolution is an essential condition for social progress; but, in its turn, a satisfactory economic evolution pre-supposes a climate of security and of progress in the social field. Our societies must be able to adapt these two aspects."

There is no doubt that we are in agreement with the enunciation of the problem and the objectives to pursue in the social field, what we do not find convincing on the other hand are the means available at European level to proceed from the enunciation to the realisation of the objectives. In fact, it seems to us that without a qualitative leap by the Community institutions in the sense of their larger democratisation and effectiveness, these objectives will remain on paper. In view of the present institutional weakness, we feel the need to express some reserves on the proposals of consultation between social partners, the outcome of which could only be a revenue policy carried out from an economic outlook.

To justify our preoccupation over the effective possibilities on the part of Community organs to fulfil the objectives which, it seems, they propose, we think it is opportune to analyse the results achieved by the European States regarding objectives proposed during 1965-70 on social infrastructures.

II—THE OBJECTIVES MISSED BY GOVERNMENTS

1. Analysis of the situation

Necessities imposed by the exodus of agricultural population towards towns and to a no smaller extent through an increasing demand for improvement in the standard of living on the part of European populations have induced many

Governments to introduce these problems in their budget or programme policies. The third medium term policy has expressed these enunciations as follows:

"A better fulfilment of collective needs, particularly of education, public health and housing, aimed at ensuring a balanced progress and a fair distribution of services; this priority requires that in the Member Countries, private consumption increases less rapidly than the national product to allow for a faster development in collective services.

The intensification of the struggle against the harmful effects of expansion on natural environment (air and water pollution, noise, excessive urban concentrations) taking into account conditions of international competition, will have to apply progressively the principle that the onus of these actions shall fall on those who have caused the noxious effects."

Unfortunately, however, the analysis of previous results is no cause for optimism. A comparison between estimated and actual consumption and of public expenditure in the six countries of the EEC leads one to rather discouraging conclusions.

Countries	GNP (1965-70)		Public consumption[1] (1965-70)	
	Projections	Results	Projections	Results
Germany (FR)	3.5	4.7	3.1	2.2
France	4.8	5.8	4.5	3.6
Italy	5.0	6.0	5.2	3.8
Netherlands	4.6	5.1	3.1	2.4
Belgium	4.1	4.4	5.6	5.1

1 *Source.* EEC, Third Medium term Economic Policy Programme

These results are confirmed by information on expenditure in the capital accounts of public administrations.

Expenditure in the capital account of public administrations

	Projections	Results
Germany (FR)	5.5	2.0
France	8.2	6.6
Italy	18.4	4.6
Netherlands	9.8	5.2
Belgium	7.5	8.6
EEC	4.0	3.2

In conclusion, faced with objectives of increase in the GNP largely exceeded, public expenditure has not increased as expected and (except for Belgium) has not even reached half what had been allotted by Governments. A graphic picture of this situation is given in calculating the coefficients of increase or decrease of public expenditure in relation to the increase in GNP for the whole Community. An estimated increase in public expenditure in capital account of 8.5 % was accompanied by an estimated increase in the GNP of 4.3 % $\frac{(8.5 \times 100)}{4.3}$ the resulting coefficient is 197.7. In practice, however, there has been an increase in public expenditure of the order of 4.9 % against an increase of the GNP of 5.29, it follows that the coefficient is in practice less than half that which had been proposed: 94.2.

All this shows undoubtedly a tendency towards a gradual deterioration in the role of public expenditure in the use of resources. Instead of a percentage reduction in private consumption compared with the public one, the opposite has occurred. The programmed estimates of private consumption have been exceeded in the six countries.

Private consumption 1965-70

	Projections	Results
Germany (FR)	3.5	4.9
France	4.5	5.3
Italy	4.7	6.5
Netherlands	4.–	5.1
Belgium	3.7	4.5
EEC	4.1	5.3

In practice, therefore, due to a lack of success in the use of public expenditure of about 20 %, there has been an increase in expenses in private consumption of 25-30 % in the EEC. This analysis lends itself to a series of considerations on the political and social plane which confirm and express the assertions made earlier.

2. Infrastructures and social evolution

This development in public expenditure was set in an extremely energetic social contest characterised by an imposing movement of labour from a professional and geographical point of view.

In the agricultural sector, the number of employed has decreased by 6.5 million—equal to 40 %—between 1958 and 1970, whilst employment in industry has increased by 3 million and in the Services sector (including public administration) by over 5 million.

Breakdown of civilian employment in major sectors in %

Sector	1955	1960	1965	1970
Agriculture	24.3	19.6	15.9	13.4
Industry	40.0	42.4	43.5	43.0
Services (including public organisms)	35.7	38.0	40.6	42.7

Source Second medium term Economic Policy Programme

As regards geographical movements, the main development has occurred particularly in the European agricultural zones, we give the pertinent data concerning the Italian internal emigration and the immigration in European countries.[3]

This dynamism of the labour force is outlined by a displacement of people behind capital dynamism the attitude of which is irrational from a political and social angle and does not correspond to the wishes of the populations involved (in countries of departure and in receiving ones), this will be illustrated by other reporters.

As regards our topic, one cannot but underline the fact that it would have needed an increased effort in social structures, since emigrants, in their displacement, create a higher demand in the amount and efficiency of urban infrastructures. In particular, the emigrant from an agricultural zone arrives in an environment where problems exist already of housing, of congestion of transport, of over-crowding, thus making them worse and frequently causing a reaction of rejection of immigrants and they are the source of deeply hurt feelings. "These reactions frequently cause tension and negative repercussions between immigrants, they contribute to resentment and discontent which increases through uncertainty of real prospects of introduction in the local life and of inadaptability. Social tensions spring from prejudices through a lack of understanding the emigrant worker's problems on the part of certain strata of the local population, insufficient information on the part of public opinion; but they also follow the inadequacies of migration policy in the countries of immigration, for instance, on the subject of social infrastructures the general insufficiency of which can be seen in various immigration collectivities, particularly in regions of major industrial concentration (absence of social reception

[3] Balance of migration movements inside and abroad, originally from the Italian Mezzogiorno (1965–1969)

1965 – 52 777　　1968 – 148 283
1966 – 70 764　　1969 – 150 604
1967 – 122 465

Total number of immigrated workers employed in EEC countries[1]

Year	Belgium	Germany (FR)	France	Luxembourg	Netherlands	EEC	Italy
1961	154 000	475 700	(935 700)[2]	20 900	28 000	1 615 000	—
1962	157 000	655 000	935,700	22 400	32 000	1 800 000	—
1968 of which EEC:	200 000 123 000	1 040 000 380 000	1 158 000 262 400	28 600 24 700	100 000 43 000	2 560 000 843 000	33 100 10 000
1969 of which EEC:	201 000 123 000	1 372 000 427 000	1 180 000 260 000	30 100 25 200	103 000 45 000	2 921 000 891 000	35 000 11 000
1970 of which EEC:	208 000[3] 125000	1 839 000[4] 478 000	1 200 000 260 000	32 000 26 000	110 000 50 000	3 426 000 951 000	37 000 12 000

Source: "Preliminary guidance for a Programme of Social Policy in the EEC."

1 Partly estimated
2 1962 Census
3 Including unemployed
4 On 30th September 1970, they amounted to 1 948 000.

services, of housing, schools, health services, recreation and culture, lack of social assistants and initiatives and assistance for young people, women and the family, etc ".[4]

From the point of view of the effects, the unsuccessful setting up of infrastructures hits above all the groups and kinds of persons less protected by the community, such as emigrants.

3. *Philosophy of economic choices*

The estimated objectives of public expenditure which for the EEC showed an average increase of 4 % based on a projected GNP increase of 4.3 % and were not reached, indicate also a policy choice, the elements of which can be found *in the Second medium term Economic Policy Programme.* The programme, in fact, proposed some measures which should have determined above all a restructurisation of the European system of production and thus should have supplied an answer to the problems arising through international competition. Amongst other things, this concept provided that "Member States and the Community institutions will have to try to establish a general climate favourable, as far as possible to the aims of enterprises and their realisation. In particular, they will have to eliminate obstacles to competition policy, to company laws, to taxation and to administrative practices which risk being an obstacle to this movement".

"... In particular, it will be necessary to ensure that the conditions exist for a satisfactory growth, considered indispensable so that structural improvements at enterprise and sectoral levels can be achieved rapidly and without serious economic or social inconvenience. It will be necessary in particular to create a favourable climate for investments, since many enterprises will not be able to fulfil the adjustment of their structures to the evolution of demand and to the conditions of productions without a sufficient attraction to invest. In the connection it will be necessary for the economic trend policy to seek to distribute sparingly the use of financial and fiscal means so as not to run the risk of upsetting inopportunely the investment effort".

So that enterprises' programmes were not upset and in order "not to oppose" investment efforts, it was evidently necessary to avoid that public organs gave the impression of wanting to direct the economy towards *objectives other than* those of the enterprises. This thinking explains the fall in public investments at the very moment they were the most needed and it is through this thinking that can be explained, for instance, the choices made in Italy in the ambit of these needs.

4. **The Italian situation**

The Italian economy, with a frailer structure compared to that of other coun-

[4] CNEL, observations and proposals on problems of emigration, Rome, 1970 – P. 150.

tries has felt more acutely this tendency to direct national resources to the advantage of private enterprises. In public expenditure, these basic choices can be clearly singled out.

Social investments by category (1966-1970)

	Programme	Results	
Public Education	960	339	— 621
Health	360	125	— 235
Transports	4 125	3 007	—1118
Telecommunications	715	927	+ 212
Public works:			
Public Building	395	218	— 177
Land reclamation	330	361	+ 31
Various	1 545	733	— 812
Private building	9 125	12 315	+3190
Errors and omissions	745		— 745
TOTAL	18 300	18 025	— 275

Source: EEC

This table is highly significant because it reveals a frightening drop (above 60 %) in school and health investments, and of 30-40 % in transports and public building. The only items which have exceeded the programmed application, apart from land reclamation, are telecommunications and private building. In effect impulse has been given to applications which help private industry (telecommunications) and private investment (private building). Without the investments recorded in these two sectors the so-called social investments would have shown a reduction of 20 % in a period during which national revenue has increased by an annual average of 5 %.

To confirm these considerations, we reproduce another table relative to the percentage between the various applications of public works from which it is easy to see that the only sector in constant percent increase is roadworks.

Road making and the regression recorded in all sectors of public transport at a time when urbanization was becoming more intensive was accompanied by a constant distortion in Italian consumption the origin of which goes back to the fifties but which had gone on at an increasing rate. The distortion concerns the impulse given to individual durable consumer goods (mainly cars) compared with collective consumption. This is shown by the progressive reduction in the

Breakdown of expenditure for public works

Percentage of the total

Years	1963	1964	1965	1966	1967	1968	1969	1970
Roadworks	34.3	38.8	38.1	40.7	43.3	47.9	48.9	45.9
Railways	6.5	7.7	8.3	8.0	6.2	5.7	6.1	8.6
Maritime	1.0	1.1	1.6	3.0	2.9	3.4	2.5	3.3
Water works	2.9	3.9	3.5	3.1	4.0	4.0	4.5	4.3
Public building	18.2	18.9	19.2	17.6	15.2	12.2	11.7	13.7
Health	12.7	12.9	13.0	15.1	14.1	13.5	12.8	14.7
Land reclamation	20.0	12.0	10.0	8.0	9.2	9.2	8 8	6.2
Telecommunications	1.0	1.0	2.5	1.4	1.8	1.7	1.8	0.9
Others	3.4	3.7	3.8	3.1	3.3	2.4	2.9	2.4
TOTAL	100	100	100	100	100	100	100	100

Source ISTAT: CERES formulation

number of passengers in public transport (tramways, trolleybuses and railways) and by the increase in means of private transport.

Passenger traffic **Passengers carried (thousands)**

Tramways Indexes		Trolley buses Indexes		Railways Indexes	
1960	100.0	1960	100.0	1960	547 396
1961	85.6	1961	105.1	1968	442 874
1962	62.2	1962	110.6		
1963	56.8	1963	107.3		
1964	49.5	1964	103.9		
1965	41.4	1966	96.7		
1966	38.7				

Source: ISTAT.

At present in Italy the number of cars in circulation should be around 11 million (1960: 1.97 million; 1965: 5.5) with five inhabitants per car, whilst estimates of the increase in the total number of cars registered in 1980 show a ratio of 1 car per 3 inhabitants for a total of 18 million. The estimates are based on an assumption of a development in home demand for cars relative to the development of personal revenue (see estimates by IRI, FIAT, ISRIL, etc.).[5]

To better pin point current congestion, we quote some information on the amount of space available in the national territory for every motor vehicle in relation to the road network.

1950: 3.5 kms.
1960: 100 metres
1968: 50 metres.

Density of population per motorcar:

1960	– 21.0	1965	– 8.6
1961	– 17.1	1966	– 7.6
1962	– 14.3	1967	– 6.7
1963	– 11.5	1968	– 6.0
1964	– 9.9		

[5] Circulation: Source ANFIA

The phenomenon of progressive congestion becomes worse if it is related to the increase of metropolitan areas where the density of population per square kilometer is still increasing, an occurrence to be reconciled with the exodus from the South and to the depopulation of the countryside.

To evaluate such congestion a few figures are sufficient: in the 8 large metropolitan areas (Milan, Naples, Rome, Turin, Genoa, Florence, Palermo, Bologna) resided in 1961 in an area equivalent to 3.58 % of the whole country, 14 481 000 inhabitants or 28.6 % of the whole population; if the present trend is not reversed, in the year two thousand, we shall have a concentration in the same territory of 29 153 000 inhabitants, equivalent to 44.8 % of the national population.[6]

In the sector of house construction, the preference given to private industry has determined:

(a) a heavy increase in prices and an outright opposed trend in the structure of supply and demand. One has thus witnessed the discouraging sight of empty luxury flats whilst there persists the phenomenon of so-called unhealthy habitations (barracks, caverns, walls of urban defence, towers, etc.);
(b) the systematic evasion of regulating plans with collateral occurrences of corruption of administration, political and civil servants and of organised delinquency.

5. Which causes have determined this situation?

It is clear that modern industrial sectors established to satisfy the demand of the international market had a vested interest in building up an internal market to reduce the risks of economic fluctuations. All this occurred, however, at the cost of rationality, i.e. of development of essential consumer goods and of collective consumption should have had priority, not only for reasons of rationality.

Yet it should be noticed that this development has characterised, even if only to a small extent, the economic evolution in all six countries of the Community, as shown by the trend of public expenditure in relation to increases of the GNP. The Italian situation shows painfully the same defects and it is the result of a more backward starting point in the matter of strength of the productive system and social infrastructures.

[6] *"Presupposed knowledge and indications for an organised policy of transports"* (November 1970)

In short, we are facing a situation which, having escaped from the grasp of the organs which traditionally controlled it, the nations themselves, found no other democratic control points and produced that imbalance in power between industry and society already mentioned.

The problem of a want of institutional adaptation must not induce one to lose sight of the responsibility on the part of governments which were required to give a major impetus to the fulfilment of the infrastructures in the face of social phenomenon already outlined and which did not succeed in fulfilling even the objectives. It seems clear to us that they were persuaded by the industrial lobby to postpone this topic, even if, especially in Italy, the possibilities of financing were somewhat extensive.

Distortions caused by spontaneous development and the inability of established powers to "develop harmoniously" our society, indicate clearly the limits of the "system" set up in Europe immediately after the Second World War and founded on the opening of economies and the want of instruments to direct it. In this examination, the missed development of infrastructures assumes a central function.

6. The political answer of reforms

The nucleus of this system relies on the power which a minority has imposed in practice on all development of the society. It is, therefore, natural that the conditions of the encounter should be sketched in principle at the level of the factory. It was in fact at the level of work that was revealed in the more open and brutal manner the enslavement of working man to the needs of production. But it was also clear that the position of intolerable subordination of the citizen in the factory having been characterised, it would have been consistent to transfer by analogy the same relationship of subordination of man at the level of society and of society faced by the production system. If at factory level it was possible to settle by negotiation with the owner, problems of rates, of chains of production and assembly, in one word the organisation of the work, outside the factory those problems which make the worker's life painful could be solved by using the same methods, also problems of regional imbalance and forced emigration, of want of essential democracy, of incapacity of the system to fulfil urban infrastructures.

Syndical organisations in Italy have become the interpreters of these requirements by launching the policy of reforms.

Action for reforms has obtained some positive results, implemented through

protocols between syndical organisations and the Government for the reform of homes and of health. The first protocol with some pejorative amendments has become law, the second expired with the dissolution of the Chambers.

Apart from the practical results it seems to us that the positive elements remain valid in this first syndical initiative.

The first is the individualisation of the parallel between the power of the contractor in the factory and in society and the statement of the problem not as a key to streamlining the system but as a key to the change in relationship of power inside the system itself.

The second is represented by the consciousness acquired by workers of the necessity for action for the fulfilment of infrastructures as an instrument to modify the development mechanism, changing purely productive aims, of production in itself and for itself, by aims of social progress, by an improvement in the quality of living.

In the third place, the choice of syndical action with its aspects of challenge has contributed in no small measure to showing the unconcern between the real country and the institutions, pointing out in the Italian experience the most significant political proof of the increasing inability of the national apparatus to cope with the new social requirements.

The action had *its limits* above *all in* the *absence of any precedent it could* follow, in the second place due to the diffidence with which political parties and Parliament have surrounded it.

There is no doubt that during some phases of the fight, errors were committed but it is also true that the large majority of Italian workers has given its full support to this action and that its aims remain doubtlessly valid on the way towards a renewal of Italian and European society. The abundance of agreement shown on the part of workers demonstrates undoubtedly the importance of these needs in a turning point of social policy.

7. Philosophy of action for the reforms and its "novelty"

We shall now quote two extracts from the syndical documents on house building and transport which show clearly the lines along which this action has moved.

"An organic policy for the home must systematically aim at establishing an optimum relation between individual and environment at the level of culture and well-being with which present society agrees. This means that enjoyment of the home must in the first place be assured by high qualitative standards and with uniform criteria for the collectivity of citizens; moreover, it is linked

with the enjoyment of all the civil and social services which go with the dwelling: urban transport, parks, schools, hospitals, libraries, places for leisure, etc. In this meaning, the policy of the home becomes a decisive element for the implementation of a higher level of living in the nation.

The means through which, hitherto, it has been attempted to ensure the use of the residence are, on the other hand, entirely contrary to these criteria. They give rise to marked inequalities between the various classes of citizens and give the home a permanent character of scanty resources. This is because it has acquired the form, the destination and the rule of any economic possession subjected to the laws of supply and demand and to distortions of income and of profit.

The only coherent way to fulfil an optimum relation between person and dwelling is, therefore, to take away from the dwelling, as happens in the case of other fundamental necessities of the collectivity, its character of exclusive economic possession and to give it the more ample aspect of prevailing social service".

Transport Policy

"The same bond exists between the mechanism of spontaneous economic development of our system with the relevant territorial and sectoral imbalances and overall progress in the transport sector, where are proposed again the same mistakes in development and similar regional and local wants.

The lines of alternative intervention in the sector, therefore, are subordinate to objectives of a radical change in the kind of development carried out up to now. These objectives must take a practical form above all as precautions against public expenditure apt to slow down the dangerous tendency towards the concentration we have at present of buildings and industrial installations in few metropolitan areas. Thus is outlined in the first place the necessity of an overall planning of the transport sector subordinate to new objectives of harmonious general development. Yet the guiding idea of planning, as optimum aim of resources in function of certain objectives must not assume a merely efficient appearance.

The objectives aimed at and the technological perspectives of the sector in other terms cannot be subordinated to a simple reckoning of economic costs and benefits. They must be rigidly established in relation to the interests and expectations of the working class, not only in terms of economic and social growth but also of increased free time, of a more extensive participation in the political and social life of urban centres and of the country, of better physical and psychological health. From this point of view, the reckoning of direct and indirect economic costs, must correspond to an evaluation of social benefits, with redistribution of revenue, of regional re-balancing, a higher rate of mobility, in civilization and better human conditions."

The first document in proposing the withdrawal from market attitude the building of homes, has the precise meaning of eliminating speculation from an essential need. The second to make transport policy an active element in directing economic development and not to be its by-product. In both cases, the revindications are alternative clues to present development founded on the priority given to development objectives at short and medium term and the subordination to these of long term ones which alone can bring an improvement in the quality of life.

It is on the basis of these considerations that can be seen the irrationality of the present real power structure for the spreading of large masses and the inconsistence of the assumption that it is necessary "first to produce then distribute" leaving to a minority the task of defining "what" and "how" to produce. It is precisely the choice of "what" and of "how" which determines the features of a society, if it will be human or inhuman, if it shall be democratic or oligocratic, if in the end it will be worthwhile living.

These revindications are set in entirely new terms as to previous syndical experience, not only in means of action (the strike), but also in aims. The demand is not made in fact according to tradition, of benefits for workers in face of an economic development the direction of which is left to others, but an alternative development capable of realising workers' aspirations. Hence the harshness of the encounter and the deep strategic meaning assumed in the encounter, the revindication of social structures.

III—PERSPECTIVES

1. Reality of the problem at national and European level

In synthesis a certain economic development favoured by the Treaty and by *national political behaviour impedes a rational and adequate development* of infrastructures right at the time when this development becomes the junction between citizens' aspirations, social progress and economic development. Certainly the conflict between development of infrastructures and short and medium term objectives based on the preservation of competitiveness of national products, in relation to the other European countries and of their products in relation to international competition, gives the problem an extremely political character and a continental dimension.

The political moment of the encounter of interests between forces which propose to carry forward a certain development of society and the others which subordinate it to needs of productive development and of European and international competition, is that of the sharing out of revenue between productive and social employment. The present institutional structure of European countries does not seem to be able to solve within itself this discussion between

groups of interests. The Italian experience of expressing this discussion in a direct confrontation between syndical action and Government has resulted in a series of perplexities and difficulties. Perplexities determined even ad hoc in the public opinion on presumed attempts by syndical organisations to occupy a place outside their competence and in particular to occupy the very political space of the parties. Objective difficulties are evidence above all by insufficient syndical action to solve completely such problems only within the ambit of a direct encounter with the Executive and with Parliamentary Groups.

A problem of synthesis of new instruments of action, not of method or of contents.

Moreover, the economic correlation of EEC countries, tends to leave out at the lowest common denominator the social uses of resources as a way of thinking of increased competition in the area and in the absence of re-balancing mechanisms at European level.

The drop in social investments and goods of collective consumption brings into play not only the overbearing action of European oligopolies and the political will of Governments, but also limited institutional instruments of the Community. The political forces of the Left and the syndicates must finally take charge of this new dimension in their action.

2. Enlargement

Certain hesitations shown by parties of the Left in certain candidate countries are in fact rather justified in view of what was said previously. Above all, Great Britain, Denmark and Norway enjoy social and infrastructure development systems more satisfactory than those of the six countries of the EEC. We do not know in what measure the economic structures of these countries will succeed in avoiding a slowing down in their infrastructures.

It is realistic to suppose that, as matters stand, also in these countries results can be obtained of the same type as those which have characterised the economic and social developments of the Six, in the sense mostly used of assigning priorities to uses of resources for economic purposes. We are of the opinion, however, that given the present situation of financial institutions in the European area, pressures could occur in any case.

The increase in international competition, the transfer of capital, the large international banks, the Euro-dollar market, are realities which weigh also in countries outside the EEC. The control of these phenomena certainly is not due to an expression of nationalism but to a new institutional revival and a new distribution of political and economic powers in the Community.

3. The Werner Plan

The solution, according to some experts, could be found in the implementation of the Werner Plan and in the decisions of the Council of Ministers of the 8th and 9th February which followed. In recent months, many doubts have been expressed on the effective possibility of applying these decisions, nevertheless, the Economic and Monetary Union remains one of the priority objectives in the present phase of development of the EEC.

The Economic and Monetary Union raises at once the problem of the Community's external relations; in fact the monetary mechanism with the reduction of internal fluctuations and with the fixing of a specific exchange rate for the dollar, implies the idea of an immunisation of the economic evolution of the Community in the face of phenomena developing on the international market It remains to be said that Werner's project will bring about the unification of financial markets and will determine a common financial policy, which may allow the control of the same phenomenon of the Euro-dollar and of Euro-emission. This perspective however, is again open to discussion through the events of August 1971 and by the Washington agreement which, not having solved the problem of convertibility leaves open areas of major uncertainty not easily linked with monetary decisions foreseen in the Werner Plan. The less reassuring aspects are to situate in various degrees of efficiency the proposed monetary measures on the one hand and the economic and social policies (regional, social, budgetary, etc.) on the other.

In fact, no proposals are made on measures nor on timing on a social level; when it is evoked in terms of finality it is as a by-product rather than a point of reference.

The decisions taken on 8th and 9th February underline the necessity of continuous collations between States, the peremptory recall to stability as an end in itself, could lead moreover to seeking a minimum common denominator at the lowest possible level of agreement between the Six Governments which could flow in a philosophy of permanent and controlled "deflation" for the whole Community.

The essence of the contrived monetary union entrusts, moreover, a prominent role to economic policy, to monetary manoeuvre in the hands of Central Banks, it constitutes a strong mechanism of monetary coordination which is the absolute bond between Community and national economic policies.

The same hypothesis of economic programmes (and wider ones of economic policy) would lead back to the choice and actions of the Central Banks. It would have a priority to the point of becoming in fact exclusive, lines of economic policy of accelerating and braking, of "stop and go", of inflation and deflation manoeuvred so as to regulate and correct the economic trend deriving

from mechanisms of present accumulation and development, without aiming at modifying them structurally through the development of social infrastructures and of an effective reversal of spontaneous tendencies.

In substance, if effective measures are anticipated, they are concerned with the monetary situation (reduction of margins of fluctuations and coordination of monetary and budgetary policies). For correctives at the level of economic integration there are no measures nor any indications of the timing, but simple expressions of wishes for their application.

4. The Autumn Summit Meeting

Numerous are those who hope that this change of tendency will be examined during the deliberations of the Prime Ministers' Summit Meeting scheduled to take place in the Autumn. In this connection, we can but express our scepticism. If there emerges a single lesson from our twenty years of community life, it is that such a Summit may take a courageous decision like the one of allotting a consistent number of resources to the development of infrastructures and, in particular, to the social-cultural ones. In these negotiations between Prime Ministers, even if there are voices in favour of such decisions they will vanish rapidly because a mechanism of decision based on international negotiations is in itself destined to find a compromise of a passive and irrelevant nature in respect of the problems and of the structure of power in the EEC. It is probable that there will be a declaration of principle which mentions without doubt the "quality of life", but it is certain that the means will not be established nor will the conditions to realise it be determined.

Conclusion

We think that we have shown sufficiently that the misery of social infrastructures in the six countries of the EEC is the product of a certain ideology, of a certain productive system, of a certain relation of strength between social classes. The ideology is the one of consumption, the productive system is a liberal one, the imbalance in the relations of strength relies on institutional insufficiency which makes our social structures dependent on the productive mechanism. The result determined by these three elements is a society which is inhuman, irrational and disequilibrated in its development. A society which limits democratic rights in obsolete territorial dimensions and in incapable institutional organs.

The unsuccessful development of infrastructures constitutes, however, the neuralgic point, the Achilles heel of its ideological fabric tending to the preservation of present equilibrium. Because their scarcity is more noticeable in industrialised urban clusters, they are more easily channelled into movements of public opinion. Because they tend to penalize the needs and aspirations for a

higher quality of life which are necessarily born in a society which has got over the threshold of poverty. Finally, because the *principals responsible for this* situation feel frustrated and challenged.[7]

The real problem is, therefore, how to give an outlet for these human aspirations born from the crisis of the way of life and the principle myths which had characterised political and economic discussions in Europe after the Second World War. Because the privation of infrastructures above all brings into cause the progressive parties and the syndicates, in short, the European Left parties which have been unable to give an outlet to these new aspirations of the masses.

The inability shown by these forces to give a political synthesis to those aspirations felt by all European citizens and to give it a Community dimension is one more of the elements which favoured the prevalence of productive objectives over social ones.

This delay must be caught up with as rapidly as possible so that social Europe may be born from a movement of extensive and organised public opinion capable of imposing brave solutions (this, Summits cannot do) and institutional progresses able to reverse present tendencies. This is a matter of linking the fights in factories with a far-reaching political scheme, the starting point of which is the fight against man's subordination to the productive apparatus in the factory, and finds the means, the institutions and the kind of the most efficient fight to give a human aspect to the European society of the future. This is a matter of making a European proposal of the workers, rooted in their real interests and in their conscience, which questions the aspect of power and the lines of development along which has moved the process of European integration. Only by taking over the burden of these interests can the Community institutions realise the facts of "an original model of development" and "improve the quality of life".

[7] Article by Agnelli, Espresso, 27th February 1972.

PROBLEMS OF INFRASTRUCTURE FINANCING (*)

G. REGGIO

The need to establish general policy conditions favourable to the development of infrastructures and hence for a movement of public opinion in this direction, changing the present balances which govern the fundamental choices of our system, does not, although a priority need, entirely exhaust the subject. This policy action is inherently long-term and can be carried out only in successive stages, with the occasional launching of projects having more advanced objectives. It therefore seemed worth while to pinpoint the problems posed by infrastructure financing in the present economic balances and sort out the information, albeit fragmentary, which the trade unions have given on this problem in the EEC Member States. The aim of the investigation is not so much to produce a list of proposals as to determine the common background of trade unionists of the various countries on a problem such as this, involving the whole of society but of special importance to workers.

The investment made in socio-cultural infrastructures, which are the most neglected but of the most interest to workers, almost always represents a transfer of income between social classes, in that it is mostly the poorer classes who benefit from it, and often a transfer in time, in that in many cases it is particularly the socio-cultural infrastructures (hospitals, schools, etc.) which have the effect of increasing productivity in the long-term only and therefore from a purely economic point of view may generate inflationary pressures.

According to the prevailing opinion, in open economic systems such as those of the Community countries the channelling of some resources towards such uses may in the short term engender a loss of competitiveness in relation to other countries' products on the domestic market and on international markets, accompanied by monetary trends and fluctuations which would jeopardize the establishment of the economic and monetary union. These opinions based on a liberal economic conception, while they are apparently indisputable from the standpoint of social justice, can easily be refuted from an economic standpoint if the long-term development projections are taken into consideration. There is no doubt that, in a wider view of economic evolution, social and cultural progress is indispensable to such competitiveness of the system. Even in the short and medium term, however, notwithstanding the stabilizing effects which may be exercised by a policy to stimulate low-cost housing or public transport, it has to be admitted that it was precisely in a period of decline in public investment (1965-70) and social infrastructures that inflationary strains caused increasing anxiety and affected both countries with high public spending rates

(*) Translated from the Italian

(such as the Scandinavian countries) and countries with less highly-developed social services (such as Italy and France). This means that the inflationary pressures deriving from increases in public investment of a not immediately or not directly productive character are negligible factors in an economic context which contains far more significant factors of inflation. The other implicit criticism in the steps previously set out in the Second European Medium-Term Programme is that any diversion of financial resources into social applications would result in inadequate structures of production and thus inhibit the necessary reorganization measures, since private enterprise would not be able to find on the capital markets the means of carrying them out. This assertion too can easily be refuted, either on the grounds of the qualitative objectives which economic growth should have and which would, on the basis of this argument, be perpetually deferred, or on the grounds of the long-term economic outlook However, even in the medium and short term it is a fact that the current abundance of funds on the capital market serves rather to generate phenomena of a speculative nature and the accumulation of unused resources than to bring about technological progress or give a fresh impulse to production. The speculative capital released by the inability or unwillingness of the authorities to develop the social infrastructures and by the accompanying "disaffection" of private enterprise is both one of the causes of the rapid growth in unemployment and a "strategic reserve" for speculators (a matter of 50-60 thousand million dollars) which, if not supervised and directed, hangs like a sword of Damocles over the economic and monetary union After these matters of, in our opinion, unjustified concern are removed from the general picture, there *remains the necessity of considering this problem and determining the priority* objectives and the best means of channelling resources to them. While there is and will still be a problem regarding limits to the assignment of resources for social uses, this will depend on the development of the economic and monetary union, since, in the long run, unduly divergent trends in public spending in the various countries will be incompatible with that union.

European trade unions and infrastructures

We have already spoken of the action of the Italian unions in the previous part of this paper. A rapid glance at the official programmes or statements of other unions shows that analysis of inadequate development of infrastructures is a preoccupation common to almost all European unions. The action programme of the three Dutch confederations starts with a statement of the reasons for the need for the trade unions to become involved in the fundamental choices of economic and social development.

One of these reasons is the danger of economic development being based solely on a private-enterprise economy with respect to the natural environment, the undervaluing of social infrastructures against individual goods and services and the (negative) influence of an economic doctrine built round concepts of production growth on the education and behaviour of consumers and on the

mentality of the general public. To combat these negative aspects the NVV, NKV and CNV have submitted a whole series of demands to the government, including a call for more housing construction, a 10% reduction of classroom overcrowding, and environmental protection. A large part of the report by George Debunne to the FGTB Congress putting forward demands is devoted to the improvement of the quality of life and, in the same context, to problems of housing, urban and rural development and transport. The final resolution calls for the coordination of the various means of transport, a dynamic housing policy and the creation of public enterprises to fill the gaps left by private enterprise in these sectors. The Congress of the FO in France was uncompromising on the housing problem; one clause of the final motion says that housing is an inalienable right for every individual and every family and that the full exercise of this right is a condition of human dignity. The debate in France on infrastructures was stimulated by the formulation of the Sixth Economic Plan. On this subject, all three of France's leading trade-union organizations (the FO, CFDT and CGT) criticized the tendency in the Plan to neglect social infrastructures.

Methods of financing

The method generally advocated by the unions for financing in order to sustain public spending, which has to be increased to a higher rate with respect to the GNP (as is generally maintained outside the trade union movement also), is taxation.

At the last FGTB Congress this problem had a prominent place and it was reaffirmed that the State should find the resources necessary for ensuring social progress by increasing the taxation on large incomes, inheritances and corporate profits. The same kind of demand is found again in the proposal for taxation reform launched in Italy under the reform policy:

"1. The GGIL, CISL and UIL affirm that the institution of a more modern and more equitable system of taxation is now urgent, as a fundamental structure to provide the State with resources and means to permit the achievement of public, economic, social and democratic ends and the carrying out of major structural reforms, in the general context of the redistribution of income to the benefit of the less privileged classes. The taxation reform should thus be inspired by the constitutional principles of progressive taxation and of adequacy and efficiency with regard to the vast public resources necessary for the gradual elimination of the many aspects of the field of charges equivalent to taxes."

One of the points in the Dutch unions' action programme is that the trade union movement is ready to take the consequences of the choices made and of the demands for an increase in public spending on infrastructures, and hence a reduction in the rate of growth of private consumption. It is also stated that a survey among union members indicated that the 0.52% increase required

in the taxation burden to meet the demands of the unions was regarded as tolerable. All the unions in the EEC countries assert, however, that account must be taken not only of the increased need for state revenue and the consequent *necessity* of introducing taxation reforms but also of the inequitability of the taxation systems and that efforts should be made to remedy this inequitability. This demand, coupled with a call for higher public spending on infrastructures, is also made by the DGB in the "DGB proposals on tax reform." With this in view, the German unions are demanding that the proposal of the Commission set up in West Germany to prepare the way for the tax reform be amended so as to ensure steeper tax graduation.

Capital market and national debt

A second source of infrastructure financing, according to the unions, is use of *the capital market by the authorities. The Italian unions* consider that the financing of new housing when the reform is in full swing should also be covered by recourse to the capital market. The Dutch unions in turn speak of the use of both private and public funds In this connection the policy advocated in some countries, particularly West Germany, on workers' funds is of special interest. The DGB has, of course, always urged better distribution of *business assets and workers' participation in capital formation, but has sought* to prevent such participation from affecting wage development and from being passed on in prices by business enterprises. Ways and means of implementing this policy are therefore special union agreements and tax concessions by the State for this type of fund. So far the aims of this policy based on the DGB statement of 9 October 1968 are an intensification of asset formation by *workers and participation by workers in asset growth*. The development of such union agreements has been impressive in recent years; to quote only one figure, about eight million workers are receiving benefits from their employers under such agreements.

The benefits furnished by the employers may be in the form of bonds, shares or liquid money. These funds, however, were largely inaccessible in the period when workers could not have them under their supervision and thus found their way into the normal financial channels. In November 1971, however, the DGB called in a further statement for the institution of autonomous funds managed by the workers and the authorities for money payments and bond issues. On the basis of this new stipulation, a debate has been taking shape from which is emerging a possibility of using these funds for investment in infrastructures and for rendering decisions by private enterprise socially more rational. In this way the funds would be one of the means of securing a say in general economic decisions, which has been one of the more important demands of the German trade unions in recent years.

Infrastructure costs

The problem of financing is also closely connected with the cost of social infrastructures, especially the cost of land and building construction. While the trade union documents provide numerous impulses to further technological development in the construction sector, whose backwardness is viewed as a defect in the system, which has given priority to other sectors of production, criticisms and demands have been chiefly concerned with the legal provisions governing building land. The French unions, for instance, have repeatedly shown up the incompatibility of the lines in the Sixth Plan, which relies mainly on the market machinery, with the solution to the problem of social infrastructures. In a motion carried by the Belgian FGTB Congress, one of the demands was for a genuine land policy and the elimination of speculation in land; the Action Programme of the Dutch unions states that the ownership of building land should be limited in order to prevent speculation and to permit immediate expropriation and a land policy. But the most explicit and incisive statements are perhaps those issued by the Italian unions which have since found their way into law, with some modification.

"Compensation of expropriation of farmland should be at an agricultural price determined on the basis of soil utilization at the time of making the compulsory purchase order. Any appreciation in market value as a result of existing or planned infrastructure work which has been, is being or will be carried out by the local authorities or by any action on the part of the public authorities should not be taken into account. Compensation for already developed land should be by the application to the farmland value of coefficients established for determining a price which is never higher than the Land Registry value or the assessed fiscal value of the construction or land, whichever is lower."

Regarding the criteria to be applied to compensation for expropriation, the principle is thus reaffirmed that it is necessary to avoid shifting on to the community the burden of the income stemming from the increase in land prices caused by urban development phenomena. The amount of the compensation should therefore be calculated on the basis of the agricultural market value of the land.

The problem of infrastructure management is also closely linked with the financing problem. It has certain aspects which give rise to heated argument between the central and local authorities and, in the matter of vocational training, for example, between employers and workers. Vocational training in Europe often takes the form of apprenticeship; the trade unions have pointed out the abuses and inefficiency to which this system is exposed, at a time when there is a need for more training than private enterprise can offer. With regard to the level of management in general, the unions support decentralization (France, Italy and Belgium).

Conclusions

The main financing tool proposed by the unions is taxation, even if some of the methods advocated are original. This is clearly because of the greater fairness ensured and the possibility of income transfer, which taxation offers. In the CFDT and CGT programmes in France, an additional tax on employers using migrant labour, equivalent to 1% of the wage, is demanded for the construction of housing for migrant workers. Such a measure has two advantages. it increases the resources for housing construction and it discourages labour-intensive investment in immigration areas, making such investment more costly

Measures of this type have been announced in some regions in Northern Italy, more particularly by the Lombard authorities. A quasi-fiscal measure has been proposed by the trade unions in Belgium with respect to commuters (workers). The employers would pay contributions for workers' journeys which would be used to form a fund which would have the effect of making such occupational travelling free and at the same time assist the financing of transport infrastructures These independent steps by trade unions and other bodies show that there is also a need for rationalization of the taxation system

A second consideration is that the tax system throws into clear relief how far the administrative levels and shop-floor representation have lagged behind the expansion at the economic level. Nevertheless, we feel that this instrument remains useful, subject to appropriate adjustments to this new state of affairs. The matter of multinational companies is dealt with in other papers. It is sufficient here to say that the unions are watching with great interest the progress of the Commission's "European" company project and consider that the proposed statute, though it may be open to criticism in other ways, has undoubted advantages in that its aim is to standardize the legal pattern for European companies. With regard to multinational companies transcending European frontiers, the ICFTU has on a number of occasions proposed an international convention to regulate the conduct of these centres of economic and political power, with reference to, among other matters, taxation problems.

Taxation will therefore remain irreplaceable as a major component of infrastructure financing only if subjected to a radical reform based both on its greater flexibility and decentralization and on its gradual transposition to Community level. This, however, does not rule out recourse to methods of direct financing (for infrastructures more closely linked with production and those involved in combating the pollution caused by certain industries) and recourse to savings capital. The IRI motorway experiment in Italy, financed by bond issues, is what we consider an interesting example and we are also of the opinion that in future too the capital market should have sufficient availabilities to solve problems of social infrastructure. The problem is rather that of setting up financing machinery to channel savings in a different way from that currently in operation. It is precisely the supervision and channelling

of investments by the authorities and the resulting effects of democratization of the economy that form the bedrock of Europe's power to create an original pattern of civilization.

In conclusion, I would like to add that we are confronted by a situation marked by some encouraging and some disappointing features. They are encouraging because the background to and general conceptions of the problem are common to almost all the European trade-union organizations, and it therefore seems possible to develop a unified strategy for this practical problem, as for others. They are disappointing because this strategy has nevertheless not yet been established and we have all remained confined within our frontiers while our governments have responded to union demands by expressing anxiety concerning the decline in power to compete with other countries—which would have been far less controversial if expressed by a European executive.

On the other hand, only one other type of political outlook would have enabled the Commission to accept these demands. Unfortunately the increasingly confederal and diplomatic trend in the Community, which seems to be towards a period of inter-State negotiation, does not seem the best approach to solving the problem. Hence, as in other sectors, the need for political development and democratization of the EEC constitutes a fundamental demand by the trade union movement.

THE RISING COST OF PUBLIC SECTOR INFRASTRUCTURE AND RESOURCES AND THE PROBLEM OF THEIR FINANCING WITH A VIEW TO HARMONIOUS DEVELOPMENT IN THE COMMUNITY

M. ALBERT

Common market and public sector resoures*

The problem of the cost and financing of public sector resources is both vast and insufficiently known. In a simple report like this one, a global analysis of any significance cannot be expected

The only acceptable method is a partial approach. It has therefore been agreed with the *Direction générale des Affaires industrielles* that this report should attempt rather to answer the following questions: Is there, within the Community or, to be more exact, because of the way the Common Market operates at present, a tendency towards a type of society where private prosperity, or even opulence, would contrast with relative poverty in public services and resources? Does not free competition and lack of compensatory factors within a customs union involve a risk of widening the resources gaps between the member countries? How should such a development be prevented? What contribution could the Community make in this respect?

With this approach in mind, and after thus placing limits to our subject, we shall merely study the retrospective accounts and the economic projections drawn up by the six member countries within the framework of the Committee on medium-term economic policy, and educe the significance of the results of that study.

I—THE PROBLEM AND WHAT IS AT STAKE

Are public resources, like buildings, collective by nature or by reason of their utility? How does this, originally budgetary, idea dovetail in with national accountancy principles? Let us take what may be considered the minimum elements in order to outline, immediately after the more European aspects of the problem, those aspects which constitute what is at stake for all inhabitants of the Community.

* Translated from the French

A—Basic ideas

Public infrastructure and resources are investments designed to satisfy public needs. What are those needs?

The description by B. Cazes[1] is clear and useful: "In addition to individual consumption for which the consumer must pay, individuals and families have needs of which the satisfaction is dependent on the decisions of the authorities. The relative importance of those decisions and the relevant public spending may vary from one country to another, depending on the political traditions which determine in each country the division between the public and the private sectors, on ethical considerations (one purpose of providing free compulsory education is to avoid parents' having to compare the expense of education with other expenditure for more immediate benefits), and on the extent to which services rendered by certain investments, such as urban road maintenance, can be "individualized" and invoiced.

It will thus be seen that public resources may be collective by nature or by reason of circumstances. The border which separates them from invested assets in the private sector varies with time and place.

To consider solely resources which are collective by nature is to adopt the narrow definition which Professor Mancur Olson, the initiator of the first attempts in the USA to draw up a social report, sets out as follows[2]: "Leaving certain terminological subtleties aside, we may define a collective good as a good which non-buyers cannot be prevented from consuming. National defence is a classical example of such a good, as it is practically impossible to exclude an inhabitant of a country from the advantages (or dangers) of the nation's system of defence. To a great extent, the advantages of the police and judiciary systems are also part of the common weal. A constitutional monarch is a particularly clear example of a collective good; the benefits of his reign extend to all his subjects, whether they be more royalist than royalty itself or republicans.

"Non-collective, or private, goods, by contrast, are goods which can be denied non-buyers. For example, if a person buys a loaf or a car, other people are denied the article bought. In other words, private goods are not consumed severally or in common."

As can be seen this is an extremely restrictive definition. It would mean that a school or a hospital bed would not be considered as a public good, when in fact they are symbolic of what are frequently called public resources. Whatever it is worth for the purpose of making an analysis, therefore, we must

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[1] *La vie économique*, A. COLLIN

[2] *The Public Interest* – No 12 – summer 1968.

adopt a broader concept which, in practice is necessarily the idea of gross fixed capital asset formation or public sector investment.

The reason for this assimilation is simply that the gross fixed capital assets of the public sector are the only useful aggregate which has been statistically standardized within the Community.[3]

The concept we have thus adopted is largely a matter of form: the criteria are the source of finance (public funds) and the legal status of whoever is in charge (exclusively the State or local authorities). This concept, adopted for the purpose of our analysis, applies to the great majority of capital expenditure for equipment required for the provision of non-negotiable goods and services by the public sector, and to the main functions of general administrative departments, such as education, transport and communications, expenditure on public health and urban and rural utilities

Nevertheless, it may be considered unsuitable or deficient for several reasons, particularly because:

(a) it reflects inputs but gives no indication of the total stock. So far there is no universally applicable means of comparing overall public sector resources in the various countries of the Community. Inventories for the various sectors are seldom useful. For instance, it is almost impossible to make valid comparisons of hospital resources, whereas market research provides very detailed information on private sector resources. It is known, for example, that fifty-two per cent of households in the Netherlands have an electric hairdryer, that in twenty-three per cent of Italian households there is at least one cat, and that thirteen per cent of German families have at least one bird . . ,[4]
(b) the figures of gross fixed capital asset formation in the public sector are of course gross inputs which give no information on the real value of the resources they represent (e.g. overheads connected with the awarding of contracts, output of public service);
(c) gross fixed capital asset formation in the public sector does not include all public investments: e.g. investments for public undertakings as a whole, including the Post and Telecommunications;[5]
(d) the factors covered by the concept are not entirely homogeneous. For instance, in Italy a large part of investment in roads, and none of the investment for motorways. is excluded from the figures of gross fixed capital assets in the public sector;[6]

[3] However, as this standardization could not be affected for the various components of the aggregate, this reasoning remains necessarily of a macro-economic kind.

[4] *30 Jours d'Europe*, January 1972.

[5] For instance, the concept adopted by the French *Commissariat général du Plan* is broader· it includes, besides the investments made by public administrative departments and hospitals, those made by the Post and Telecommunications and by the Paris transport service, the *Régie autonome des transports parisiens*.

[6] In France, on the other hand, the investments of the mixed economy companies holding concessions for the operation of motorways, which have amounted over the last few years to about 2-3% of the additions to gross fixed capital assets in the public sector, are included in the aggregate.

(e) some capital transfers within the public sector, by definition excluded from the figures for gross fixed capital assets, nonetheless contribute to the stock of public resources;
(f) the distinction between expenditure on capital investment and operating costs is often reached by arbitrary decision. It is of little importance whether a public service requires more equipment or more manpower;[7] the main thing is that the service should satisfy needs. Consequently, the most advanced research today seeks to go beyond the conflict between investment expenditure and operating costs by endeavouring to quantify the benefits with which public financing provides the end-users, the consumers.

Considerable progress in this respect has been made in France, thanks to the first attempts to measure the "broad household consumption", which includes consumption as understood in national accounting principles; community services which are "divisible", that is to say those of which the beneficiaries may be fairly easily identified; and transfers related to the consumption of goods or services (e.g. social security benefits).[8]

It has, for instance, been calculated that public expenditure affects hardly one per cent of food consumption, whereas it accounts for two-thirds of expenditure on education, sports and health.

This extremely interesting research has prompted UNESCO to develop it at the European Centre for the Co-ordination of Research in Social Science (ECCRSS) in Vienna. The results of this research are available only in France. This is all the more regrettable as the research has a bearing not only on Western Europe but also on the socialist democracies.

Reverting to the gross fixed capital asset formation (GFCAF) in the public sector, for want of a preferable alternative, the question must be asked, before broaching the European aspects of the subject, whether there is a specific problem of cost and financing of public infrastructure and resources.

So far as the first point is concerned, although the cost of public investment often increases at a relatively rapid pace, it does so mainly because as much as two-thirds of it is in building and construction, which is subject to the two-fold effect of rising wages and the increasing cost of land which is in short supply.

However, these remarks are of minor significance compared to what Bertrand de Jouvenel[9] has to say concerning the sector of "non-declining cost activities", that is to say, where economies of scale are not operative, productivity remain-

7 This is also the case in education, where audio-visual techniques can partly, but only partly, substitute for teachers.
8 Credoc: J. Desce, Consommation 1969, no 2.
9 Analyse et Prévision – November 1969.

ing constant or only slightly increasing. This is the case, *inter alia* in medical treatment, the cost of which in the United States increases three times as fast as overall purchasing power. Bertrand de Jouvenel shows that goods produced by sectors where increasing productivity is the rule tend to be supplied in terms of market forces,[10] whereas the public authorities are required to dispense the other goods.[11]
However, the public authorities often lack the means of doing so satisfactorily. Even in the affluent societies, impending shortage is characteristic of the activities incumbent on the public sector. Even worse, as Galbraith demonstrated long ago, the industrial system tends to make increasing private wealth coincide with impoverishment of the public sector.

Underlying this contrast is the consumer-taxpayer argument. When a consumer buys something on the market he obtains an immediate personal satisfaction; when the taxpayer settles his tax liability, he obtains cold comfort from the prospect of much later or hardly perceptible satisfaction in exchange. Of course, we all know that the taxpayer's tribute is essential, if only to permit the consumer to enjoy in peace the income which remains to him. This type of argument, however, is hopelessly inadequate to redress the characteristic imbalance of our industrial societies.

Consequently, the hordes of city dwellers, every morning and evening, crowd into the comfortless public transport vehicles while private cars in the increasingly traffic-jammed streets are threequarters empty;[12] the excessive individual consumption of drugs is exacerbated concomitantly with the shortage of hospital beds;[13] a plethora of children's toys is now accompanied by a scarcity of playing grounds, and so on. In every aspect of society the same disequilibrium is to be found to some degree.

This imbalance points to the central problem of the financing of public resources which, as such, will not, however, be dealt with here. We shall thus avoid any exposition of old theories according to which orthodox budgeting enables investments to be made from borrowed funds whilst current expenses must be covered by revenue: in both cases funds are drawn from the national product and consequently the satisfaction of private needs competes with the

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[10] Cf. developments in the telecommunications system mentioned on p. 572.

[11] There is perhaps a sort of financial burden here which in a way reminds us of the relationship between the Community and the member States which agree to pool problems and old techniques (coal, agriculture customs dues) but are intent on keeping what may be future advantages to themselves (atomic energy, scientific research, the problem of direct investment, and so forth)

[12] In France, the report published in 1969 on the nation's "transport" accounts, showed that the average Frenchman in 1967 devoted 82% of his "transport" budget to private transport and only 18% to public transport; from 1962 to 1967, the total cost of transport by private car rose 7%, whereas the cost for public transport rose 25 3%

[13] In 1965, inmates of psychiatric hospitals in France exceeded capacity by 19%, one patient in six having to make do with a stretcher instead of a bed. In addition, 67,000 beds out of 108,000 were more than 80 years old (*L'argent signe de santé?*, *Convergences*, *SPES*, 1969).

satisfaction of community needs. This is what we are concerned with here. The problem of recourse, to a variable extent, to borrowing is related rather to political considerations.

B—European aspects

Nowhere more so than in Europe is it necessary to remedy this disequilibrium between increasing private wealth and impoverishment of the public sector. It stands condemned by our whole tradition, from ancient Athens which might not have been Athens were it not for its public monuments, through the Middle Ages with its cathedrals, to the invention in Europe of free compulsory education and of social welfare services in a free society.

Yet the economic revolution bids fair to aggravate the disequilibrium, due to the raising of the standard of living which henceforth takes the form of a relatively excessive increase in tertiary consumption in which the share of the public sector, and hence the need for public financing, is particularly large.

It can be understood, therefore, that in the initial stages of their economic programming, the EEC countries laid stress on the problem of collective resources.

Even in matters in which the Common Market has made most headway (custom union, common agricultural policy) success was achieved only after protracted efforts to bring the member countries' initial standpoints into line with one another. In contrast, it was a striking fact that their essential aims in matters of collective resources were spontaneously defined in terms of consentaneous points of view. This is shown by the analysis of the projections adopted by the member States for the first programme of medium-term economic policy (MTEP), and is reflected in a figure of symbolic value: the rate of increase in public investment during any five year period should on an average, throughout the Community, be double that of the gross overall product (8.5 % per annum in volume, as against 4.3 % for the GNP). In addition, this very remarkable difference was no more than the work of chance or of a fleeting combination of circumstances. It reflected a political determination based on one of the soundest of principles.

That official policy of the Six condemns the disequilibrium between the ever greater satisfaction of private needs and the inadequate satisfaction of collective needs. It was defined as follows by the Commission and later by the Council of Ministers in 1967[14] with the full approval of the Economic and Social Committee and the Parliament of Europe:

[14] *J.O. des Communautés*, 25 April 1967. "Premier programme de P.E.M.T.

"Apparently, the only possibility of ensuring a larger margin for growth in private consumption lies in checking expansion in public expenditure. It is a possibility, however, which is largely illusory.

"At the beginning of the century, public expenditure by the large States was rarely greater than fifteen per cent of their gross national product. Everywhere today, in spite of the sacrifices imposed by the pressure of taxation to meet it, public expenditure exceeds one-third and, in States which have most widely developed their social security systems, sometimes accounts for almost half of the GNP. This is an evolution which it seems difficult to reverse.

"To believe that it could soon be brought to a halt would be tantamount to claiming that a balance had been achieved in the satisfaction of private and collective needs. But no such balance has been achieved. The demands of public health are still neglected compared with feeding habits; the density of motor traffic increases at a greater pace than the provision of roads and parking space; the infrastructure for education, culture, and science lags far behind the development of private resources of all kinds.

"Under these circumstances, we must all realize that excessive growth of private consumption will inevitably lead to yet more stringent privation in terms of hospitals, roads or schools. In addition, future economic expansion (transport, education, research, housing) is largely dependent on public expenditure.

"Consequently, living standards, even the very quality of existence, are already, and in the future will be even more, dependent to a great extent on the sum total of collective resources and services which, when all is said and done, only taxation can pay for in the long run.

"In any case, if the increase in public investment were curtailed, the result would be no more than a very moderate improvement in private consumption, which would increase by hardly one per cent for a 15-20 per cent cut in such investment."

This makes interesting reading today, the more so because, if it still conveys the intentions of the governments of the member countries, those governments have, on the whole, by no means achieved their objectives in this field.

Hence the basic question: is there not, behind the machinery which runs the Common Market in its present form, some invisible force thwarting national governments and favouring a type of growth which is commercial and inequitable, a notable characteristic of which is the contradiction between private prosperity and the mediocrity of a large part of the public services and resources?

To reply to this question we must consider the facts, that is to say the objec-

tives on the one hand and the results on the other, both of the Community as a whole and of the individual member States.

II—THE EEC PUBLIC SECTOR RESOURCES POLICY. COMMON FEATURES

The table given in Annex I shows, for the five main countries of the EEC, the forecasts and results for the period 1965-70, and the forecasts for 1970-75, of the rate of growth in the overall product and of the four major uses of that product, namely public and private consumption, and gross capital asset formation in the direct production sector and in the public sector.

A. Objectives

The projections[15] of the Community's first programme of medium-term economic policy for the 1965-70 five-year period are a clear illustration of the principle mentioned above.

Whatever the differences in gross product growth rates[16] (Germany, 3.5 %, Italy 5 %), the distribution of that growth among the four major uses is consistent with a philosophy which to a remarkable degree is common to all member countries. The policy of each is to limit consumption in order to increase capital investment (GFCAF), with priority to investment in the public sector.

Such is the target of those projections: redress the imbalance between the satisfaction of private and public needs. A useful formula for the calculation of the advance which each country allocates to public investment in comparison with the gross national product can be obtained thanks to a "coefficient of equalization" (see Annex II).

This simple calculation shows also more or less the same pattern in the new projections for 1970-75, except for the special features of concern to France which will be discussed later. This continuity of intent is the more notable for the fact that, as can be seen from Annexes I and II, the Community as a whole resulted not in the desired restoration of the balance, but in a relative decline in the volume of its collective resources: the "coefficient of decline"[17] is 94.2.

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15 These projections, prepared by the national administrations concerned, show both contingent forecasts and definite objectives.

16 Calculated in terms of volume. It should be noted, incidentally that unlike the projections for the third programme (1970-75) which are based on values, those for the first programme had to be based on volume.

17 According to the defir [illegible] decline occurs when the "coefficient of equalization" goes below 100.

B—Results

That result is curious, the more so as forecasts of overall product growth were appreciably exceeded (5.2% as against 4.3%). Indeed, that extra margin should have been assigned as a matter of priority to those uses which it is considered should be granted precedence, namely, public resources. It would seemingly have been more easy to do so as those resources are equivalent to about only 3-5% of the GNP. Their rate of volume increase, therefore, if the States had had the slightest degree of mastery over their own finances, should have been of the order of about ten per cent per annum. Yet, in fact, the rate was less than half that figure (4.9%).

This short-fall is the more serious as it concerns all member countries except Belgium; its impact is the more widely felt as public sector consumption also was below the levels forecast, and in that respect there was no exception. The contrast between objectives and results as a whole, and throughout the entire Community, is a contrast between the public and the private sectors.

1. *The Private Sector*

(a) Private Consumption

The countries of the Community as a whole endeavour to keep the rate of expansion in *private consumption* below the rate of overall product growth. This is shown by the projections for the first programme for all countries except Germany. That exception suggests a bold approach, in view of the rather warning tone of the following excerpt from the first programme: "All things considered, it would hardly be realistic to expect real private consumption over the period concerned to exceed the projection forecasts. If private consumption growth at the beginning of the five-year period were to reach a higher rate, a relatively abrupt check on private spending would be inevitable at the end of the period. The consequences, which would be non-productive and even harmful, particularly for employment in certain sectors, would far outweigh the earlier advantages."[18]

It is a striking fact that the relative austerity thus forecast for all the countries in 1965 failed, except in France. This can be seen from the comparison of forecast and actual figures for private consumption and overall product. The failure was so marked, indeed, that the orders of magnitude were inverted and this inversion, incidentally, as already mentioned, was the more significant in view of the fact that the real value of the overall product in each country had increased much more rapidly than expected.

[18] It was only the particularly favourable international situation for the greater part of the five-year period which prevented the occurrence of such difficulties which moreover, may have been only deferred for some countries

It is difficult to believe that the Common Market had any direct influence on these results.

On the other hand, it may well be assumed that there was an indirect, albeit minor, influence favourable to the limitation of real consumption increase, in so far as increased competition results in equal production at relatively lower cost.

(b) Gross fixed capital asset formation in the private sector hardly calls for comment. That results were appreciably higher than forecast in all countries except Italy (that country's projections for investments as a whole being over-ambitious) was undoubtedly due both to the fact that they reflected the general prosperity and to their direct medium-term link with the momentum of private consumption.

2. *The Public Sector*

Unlike the private sector, the public sector is characterized by results which in general fall short of the forecasts, often to a considerable degree.

This is shown in the first place by figures for:

(a) Public Consumption: 3.2% as against 4%, throughout the EEC. Germany is a special case. The growth rate of consumption in the public sector, averaging 2.2% per annum, is almost one-third less than the apparently cautious forecast of 3.1 per cent.

These findings are all the more important because not only was no part of the unexpected excess overall product assigned to current needs in the public sector, but the share which was allocated to those needs was lower than had been allowed for in the projections, in spite of the higher than expected overall economic performance of the member countries.

Growth in public sector consumption no doubt depends to some extent on the year-to-year policy of governments, which are not trammelled by projections based on economic reasoning. None the less, it is difficult to understand why in all countries results in this field—where forecasting is less a matter of chance than it is in others—were so strikingly below expectations. It may well be asked whether some powerful and unexpected forces—inflation for example—have not been working against the governments' intentions.

Be that as it may, the new forecasts for the current five-year period show two kinds of reaction to the results reported, namely either a change in policy with a view to inhibiting in varying degrees the increase of consumption in the public sector (as is the case in France, Italy and the Netherlands), or, on the contrary, as in Germany, a clear determination to bridge the gap:

"*the growth rate exceeding that of the* expected GNP in the Federal Republic, is unquestionably an expression of policy and of 'the need to bridge the gap' in many sectors (particularly in education, vocational training and public health)."[19]

(b) Investment in the Public Sector

This is both the most interesting aggregate in itself, and the one which is at the centre of our subject. It may therefore be useful to examine the factors which, *in this field, have, as already mentioned, led to results radically different from* forecasts.

The first question which arises concerns prices. All factors in Annex I refer to quantity. Could not the low public sector investment from 1965 to 1970 be

due, at least in part, to a rapid increase in the cost of such investments?

The reply is given in Annex III, which shows how the public sector GFCAF price index fluctuated in the six member countries of the Community and in the four candidate countries from 1961 to 1970. It would seem that no general law can be inferred from a comparison of that index with the index of implied GNP prices.

The actual process itself, that is to say the quantitative development of public sector investments from one year to the next, is characterised by a marked lack of uniform continuity (cf. annex IV, pp. 1-10) which, for the six member countries and for Great Britain, is reflected in the comparison of their GFCAF variation coefficients and their GNP variation coefficients. (cf. annex V) Apart from in Luxembourg, the GNP coefficient varies between about 0.2 per cent and 0.5 per cent, whereas the coefficient for public sector GFCAF is about double those figures. In other words, public sector investment variations from one year to another are twice as large as those of the GNP.

These general indications are perhaps less eloquent than some concrete examples. For example, from 1966 to 1968, the rate of increase in public sector investment, calculated in terms of value, rose:

—from – 12.3 % to + 11.8 % in Germany, and
—from – 2.6 % to + 20.4 % in Italy.

As can be seen, public sector budgets for fixed capital in recent years, whatever the intentions of the States, were merely used as a means of balancing out or adjusting.

Whereas governments intended the aggregate of such fixed capital assets to be

[19] Study group on medium-term economic outlook, *Perspectives pour 1975*, part one, Brussels, March 1971.

the mainstay, the permanent objective around which the others should be deployed and varied to serve a strategic aim which was, more or less explicitly, to be a European response to the challenge and dilemma of "Industry and Society", that aggregate in reality resembled rather a cork bobbing on the waves, buffeted about by fluctuating circumstances.

Those fluctuations were singularly lacking in symmetry, dependent on rising prices exceeding the most pessimistic fears, and regularly inhibiting progress in the building up of public sector assets.

This central phenomenon may be resumed as follows for the whole of the EEC from 1965 to 1970:

	GNP	*Public sector investment*
Forecast	4.3	8.5
Actual	5.2	4.9

Such a phenomenon can only be explained in two ways:
—either the projections of the first MTEP programme were completely wild—yet it is so surprising that all countries made the same mistakes, in the same direction and on such a massive scale,[20] that this hypothesis may be discounted;
—or it must be admitted that the increased rate of real growth, far from favouring public sector resources development, can in certain circumstances actually hinder it and even lead to its relative regression, not only in the short term, but also in the medium term.[21]

This is undoubtedly what has happened in the EEC since 1965, considering the rate of inflation which has accompanied its relatively rapid growth. Under the circumstances, which still persist today, it might be easier for the countries of the Community to achieve rapid development of their public sector resources with a more moderate rate of increase of the order of four per cent, rather than with accelerated development of up to five per cent.[22]
This conclusion, which is about as senseless as Galileo's theory that the earth revolves about the sun, and not the sun about the earth, runs counter to all ideas prevailing in official circles, particularly in France where it is disproved by the experience of the last few years, seeing that, from 1968 to 1971 an unprecedented overall growth (20.4% by volume, i.e. 6.4% annually) has

[20] The projections on which the MTEP programmes are based are undoubtedly defective in some respects and inadequately synchronized. No doubt the reservations expressed above on the content and significance of public sector investment and resources must be borne in mind. Nevertheless, the trend indications examined here appear to be indisputable.

[21] This is particularly the case in default of an effective monetary policy and where, for political reasons, fiscal flexibility cannot be used sufficiently.

[22] In this respect, it is rather intriguing that during the last decade Great Britain, whose economy is so mediocre, maintained a relatively high rate of increase in public sector investment, at least until 1969, since the share of GNP allocated to such investment rose from 3.4% in 1961 to 4.8% in 1970 (cf. Annex IV, p. 580).

been accompanied by diminished expenditure in public sector investment in absolute terms. Furthermore, how widespread is this erroneous belief, has been recently observed during the discussions on the major options of the Sixth Plan when the representatives of heads of undertakings proposed opting for a "Japanese style" rate of growth, arguing, *inter alia*, that accelerated growth would produce surpluses available for public sector resources. This option was rejected because of the sacrifices such accelerated change would involve for certain sections of the population,[23] but *no one, not even from the government* representatives, questioned the grounds of the employers' argument concerning the relationship between growth and public sector resources.

For instance, we all know that a high rate of growth—other things being equal—makes for increased private investment and inflation. We are all aware that, the monetary policies of the EEC member States proving less and less effective, greater recourse must be made to the economic regulators of budgetary systems; that is to say, the input of public sector resources—the only flexible element within the purview of budgets dependent on fixed-rate taxation—must be considered merely as an instrument, or even, in a sense, as a measure of surplus. No national policy, however, seems to take into account that the accelerated growth of the GNP in fact restricts that public demand *which causes the EEC to drift towards a type of society very different from* that chosen by the responsible governments.

Such a society, moreover, would hardly be acceptable to the less favoured sections of the population. Indeed, a shortage of public sector goods and resources aggravates social inequalities. In the absence of suitable public hospitals, the wealthy can afford private clinics; if public education is not provided, they can send their children to private schools; inadequate public transport is no inconvenience to those who are masters of their own timetables, especially if they have their private chauffeurs. It is the small and the weak who are the first victims of all these shortcomings.

Such is the lesson to be learnt from a macro-economic study of the public *financial policy of the member countries since 1965.* United in an ambition to reduce the social inequalities by bringing better living conditions within the reach of their populations, they are united also in the almost general disappointment of their ambition.

[23] "To advocate vigorous growth is to urge a country not to spare any effort. But we are equal to the task, for there is no question of committing the nation to disorderly growth, that is to say, of releasing all the brakes which control the changes under way This eventuality was envisaged when the options were being prepared, and thoroughly examined in the symbolic form of an annual GNP growth rate of 6.5 per cent. That work, like the in-depth consultations carried out by the socio-industrial bodies concerned, showed the lack of realism *in such a hypothesis. Indeed*, the nation is not prepared to accept the consequences, such as the intensification of the rural exodus, the increased mobility of manpower, the rapid disappearance of small-scale enterprises engaged in crafts, trade and industry Violent and abrupt efforts are incompatible with the stage of development which we have reached What is more, we need orderly and regular progress limiting individual inconveniences To encourage and keep abreast of change, that is the type of growth we aim for." (Introduction to the report on the Sixth Plan, p 12)

Moreover, the resultant relative aggravation of social discord is doubled, as we shall now see, by the widening of the structural inequalities in the infrastructures and public sector resources of the member countries.

III—TWO TYPES: FACTORS FOR DIVERGENCE

So far we have based our arguments on growth rates, that is to say data derived from inputs. Let us now consider those inputs themselves. Unlike the previous study, this one shows what is more or less stable in each of the national systems and underscores the differences between them. In this way an attempt may be made to interpret the differences from country to country of the general phenomena analyzed above.

The six member countries and the four candidate countries are classified hereunder according to the average GFCAF rates in their public sectors in relation to GNP over the last reported five years.[24]

TABLE 1

Countries		Countries	
Netherlands	4.96	Luxembourg	4.19
United Kingdom	4.80	Germany	4.00
Denmark	4.66	France.	3.40
Norway	4.40	Belgium	3.20
Ireland	4.20	Italy	2.42

It can clearly be seen that these ten countries fall into two categories which seem to be connected neither by geographic nor socio-religious factors. It seems reasonable to assume therefrom a distinction between two types, the "Nordic" and the "Latin".

So far as the EEC countries are concerned, moreover, that distinction is corroborated by many other factors, such as the more old-fashioned economic structures in the Latin countries, higher protective tariff before the founding of the Common Market, and so forth. As a result of those differences, France and Italy, particularly the latter, have had to make special efforts to adapt to the Customs Union. The fact is undoubtedly not unrelated to the following remarks about those countries.

A—The "Nordic" type

The first category seems to confirm the existence of a sort of "Nordic" type in which not only is the scope of public welfare particularly extensive—as is

[24] (Cf. Annex IV, pp. 581–591). For the candidate countries the source was the OECD and not the OSCE. Last year, 1970, except for Luxembourg, Denmark and Norway, which was 1969; and Ireland. 1968.

well known—but in which public sector investment—and this is undoubtedly less well known—absorbs at least four per cent of the GNP.[25]

The four candidate countries fall naturally into this category. It can readily be imagined that they are keen to know whether the Common Market system does not include some sort of concealed mechanism leading to a "competitive deflation" of standards in the finance procedures of the public authorities.

Two cases, Germany and the Netherlands, are particularly interesting in this respect.

1. *Germany*

With a four per cent rate, Germany is in a midway position. However, although calculated on the average of five years, that position seems to be more circumstantial than structural. From 1963 to 1965, in fact, the Federal Republic had reached a distinctly higher rate, namely 4.4 per cent (cf. Annex IV, p. 581).

Political history in Germany may show that from the time they assumed responsibility for the country's economic affairs, the Social Democrats—in spite of the fact that their doctrine is the one which is most in favour of developing public sector resources—never achieved growth rates exceeding one-third of the rates that the Christian Democrats had set as their targets. However, to see in that a change of policy or the effect of an error in calculation would be an illusion.

The cause is two-fold:

In the first place, during the 1965-67 recession, the Länder and the district authorities drastically reduced investments, for the simple reason that their revenue from taxation had itself declined due to the reduced economic activity. Local authorities did not even take advantage of the lower interest rates to increase their borrowings. That, among other things, caused the collapse of public sector GFCAF to – 12.3 % in 1967.

Far from redressing the balance, as it should have done, the public sector in the Federal Republic at that time acted as a pro-cyclic aggravation of the recession.[26]

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[25] From this angle, it would appear useful to point out that the level reached by the USA has been both lower (3%) and stable for a decade (cf. Annex IV, p. 591).
This is sound confirmation that the effort devoted to private sector resources is not proportionate to overall wealth.
In this connection, it may be tempting to draw a parallel between the "American type" and the "Latin type", both distinct from the "Nordic type".

[26] This phenomenon was at the origin of the important law of 1967 relating to the programming of public finances. This example shows the need for a regulating organization along similar lines for the future European Economic and Monetary Union.

Later, from 1968 to 1970, the rate of growth in public sector investment increased, but a larger part of the increase was accounted for by higher prices, which rose by more than 16 percent in the year 1969-70 (cf. Annex III). This extraordinary inflation was itself largely due to the following paradox: in spite of its growing economic strength, the Federal Republic of Germany over the preceding years had experienced increasing and particularly serious difficulties in the way of an independent and effective monetary policy, due to the increased amount of floating capital speculating on the revaluation of the DM.

This inability to control its money could only be overcome by Germany in three ways:

(i) revaluation of the DM (experience has shown the possible disadvantages);
(ii) restrictive regulations on capital transfers (which are necessarily detrimental to the proper allocation of resources and are, at least in the long term, a factor which weakens the country's institutions);
(iii) formation of a European monetary union (which was essential to enable the Community to regain independence in credit policy).

It so happens that all the EEC countries have experienced, in varying degrees, difficulties comparable to those besetting Germany, as is shown in Annex II. Least affected were the Netherlands and France.

Bearing in mind the role which public sector resources can play in the reduction of social inequalities, it can be stated that the absence of an economic and monetary union indirectly contributes to aggravate those inequalities in the member countries of the EEC.

2. *The Netherlands*

The Netherlands, a typical example of the "Nordic type" was able to avoid these difficulties until 1969.

It is the first in line of the ten, in the order of ratio of public sector GFCAF to GNP, with a rate approaching 5 per cent. It is its firm intention to maintain that position and even to increase its lead, its 1975 target being 5.6 per cent.[27] The strange thing, however, is the fact that apparently Holland has been, and is still, able to retain mastery of its policy when it is, of the ten countries, the one which is most dependent on external trade. External trade, indeed, accounts for about fifty per cent of its GNP.

It is a fairly widespread belief in the Common Market—particularly in France—and a fear which is sometimes acute in the candidate countries—

[27] This record is undoubtedly not unconnected with the cost of port installations and protection from the sea.

especially among some trade union circles—that the wider a country opens its economy to foreign trade, the more difficult it is for it to put into practice ambitious financial policies designed to make the country a model society. In short, free trade necessarily leads to "consumer societies" of a standard type.

This idea was particularly clearly expressed in a recent report[28] by an extremely competent French expert, Monsieur Claude Trabuc which was presented by Monsieur Jean Charbonnel, Chairman of the National Assembly Finance Commission: "The width of the opening for foreign trade, and the trading partners' share in the GNP, are what determine the options available in policies concerning prices, wages, budgets, taxes and rates of interest, in which government action has a regulating effect but beyond which its decisions have no effect or an effect which is unsought or which leads to disequilibrium."
According to this idea, then, there is no way out. Economic interpenetration would inevitably give rise to an irreversible process leading to dependence on abroad which would, *inter alia*, "dictate" the lines of budget policy. The simile of the cork on the waves comes to mind once more.

There is something admirable about the fact that proof to the contrary is provided by Holland, a country which is small only in size, and for which to bring such messages to others is in keeping with its tradition.

But we have yet to understand why the Netherlands has had a particularly wide margin of freedom in this matter.

Several factors may have contributed. In the early days of the Common Market, Holland was very competitive, due largely to its relatively low wage levels, and remained so for several years thanks to a relatively effective revenue policy. Subsequently, public sector budgets were very useful compensators during the recession of 1967-68. On a more general level, the buffer against the disequilibrium prevailing abroad was maintained, thanks no doubt to exceptional circumstances (such as the coming into operation of Groningen Gas) but also to the excellent results of a policy of specialization and acquisition of foreign markets, which for a whole generation has constantly strengthened the competitive position of the Netherlands economy.

However, the tolerable limit of inflation was reached in 1969, when Holland had to reduce considerably the rate of increase in public sector investment (cf. Annexes III and IV, p. 589), in company with the other countries.

It is not for that, however, that we may ignore the lesson to be drawn from the Netherlands' example: the possibility of financing an ambitious policy of public sector resources, even for a small EEC country, may depend as much on the soundness of its economic institutions and of the policy relating to those

[28] *"Système monétaire international et politique monétaire européenne"*, June 1971.

institutions as it does on the extent of its intercourse with the rest of the world.

B—The "Latin" type[29]

In table one on page 20, three of the ten countries have an average public sector GFCAF/GNP ratio of less than 4 per cent. Three of the four are "Latin type" countries, the fourth is Belgium, where the "Latin" character has become attenuated.
Italy and France call for special consideration.

1. *Italy, or the "growth race"*

The structural backwardness of Italy compared to the other European countries is not its only singularity. It is the only one of the ten member and candidate countries which, for the last ten years, has devoted a decreasing fraction of its GNP to public sectors resources (cf. Annex IV, p. 505): the average rate of 2.78 per cent for the years 1961-65 declined to 2.42 per cent for 1966-70.[30]

How can we explain this trend in a country about which the least that can be said is that its public sector infrastructure in general is by no means satisfactory? The reply may perhaps be found in the reasons underlying the break in the trend which is shown in the following table.

TABLE 2

ITALY[1]

Average rate of annual growth (at 1963 prices)

	GNP	Public sector GFCAF	
1951 – 1955	5.6	7.2	8.6%
1955 – 1960	5.6	10.0	
1960 – 1965	5.3	3.4	4.0%
1965 – 1970	6.0	4.6	
Projection			
1970 – 1975	6.0	12.3	

1 *Source:* except for the years 1951-55: Third MTEP programme, Report of the medium-term economic prospects study group known as the "Groupe de WOLF" (p. 104).

29 "Contemporary Latin type" might be preferable. Whereas a low rate of public sector resources development is a feature of the modern Latin type, the decadence of ancient Rome, by contrast, was due to the fact that too many citizens lived in idleness for too long at the expense of a lavish exchequer.

As can be seen, from the time when the Treaty of Rome came into effect (to all intents and purposes in 1960), the growth rate of Italian public sector investment fell by half (8.6 per cent from 1951-60, as against 4 % from 1960-70), despite the fact that the increase in GNP was stable.

No doubt private investment in Italy also slackened off, and perhaps more markedly still, from 1960-65, but only to make a vigorous recovery in the years which followed. Another important factor no doubt is the Italian budget items known as "residui passivi", that is to say, credits carried forward because an ill-equipped public sector has been unable to spend them. None the less, the overall, savage and lasting character of the break in the trend suggests that the following hypothesis is the most plausible: At the time when the Treaty of Rome became effective, Italy was very concerned about its industrial backwardness. It even feared that there might develop, and on a European scale, cumulative phenomena similar to those which had reduced the Mezzogiorno to economic decadence a century ago. Hence the existence of a scale of priorities for the satisfaction of the capital needs of industry, behind a screen of apparently favourable programmes for the promotion of public sector resources development. Italy plunged headlong into the growth race, and in that way confirmed the "Italian miracle".

But the miracle was made possible only by an excessive geographic concentration of industry and by large population movements; the backlash was the crisis, not only social but economic or, to be more precise, industrial, which has beset the country for the last two years.

What, indeed, was the cause of the crisis if it was not, at least to a great extent, that the workers who migrated from the south to the north of Italy bore the brunt of the inadequacy of the public resources necessary for a higher standard of living than that which was theirs? In other words, by concentrating on the quantitative progression of its economy, to the detriment of the qualitative needs of its most vulnerable workers. Italy managed to place its economic development in jeopardy.[31] So true is this, that the crisis began in 1969 with a series of general strikes for a new public sector resources policy covering transport, town planning, hospital reform and, especially, housing.

The Conference for which this paper is intended is entitled "Industry and Society" and it seems that we have broached here one of the main points of this vast subject.

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[30] The ANAS and IRL investments in roads are not included in public GFCAF. If they were the percentages would be increased to 3.2 for 1961–65 and 3 0 for 1966–70.

[31] A by no means original conclusion It was reached by the Italian employers' representatives (*Confindustria*) in 1970 It is, however, useful to show how it is justified by the results of macro-economic analysis, the more so as the Italian case offers, for the first time, decisive experimental proof of the importance of the criticisms which B. de Jouvenel has been levelling for more than ten years at the calculation methods current in national accounting

In the framework of the Conference, it would seem useful to give close attention to the two cases of Italy and the Netherlands. In 1958, they were the Community countries with the lowest per capita income. The former staked everything on industry. After a splendid start, its forced march towards industrialization seems now to have become sluggish, like a man struggling through a quagmire. The latter, by contrast, while placing the satisfaction of public needs high on the list of priorities, and in spite of the difficulties of the economic situation, can be held up as an example for the success of its industrial economy.

Let us take a concrete example of that contrast. Although public sector resources as defined for the purpose of this study do not include housing, housing policy is a case which is particularly enlightening. In the Netherlands, where 9.6 houses per thousand inhabitants were built in 1969 (as against only 5.2 per thousand in Italy), housing is to a great extent considered as a public resource. Of the houses built in the Netherlands that year, 84.9 per cent were subsidized from public funds, in other words, nearly ten times the 8.8 per cent in Italy.

The corresponding proportion for the EEC as a whole was 48.3 per cent.[32] In the Netherlands, 40 per cent of the total cost of housing was subsidized from public funds, as against 5 per cent in Italy, so that from 1958 to 1967, rents rose by 51 per cent in the Netherlands and by 97 per cent in Italy.[33]

On the morning of 19 November 1969, no doubt for the first time in history, a general strike as a protest against the housing policy—and not against low wages—broke out in Italy.

2. *France in the wake of Italy*

Now we come to something even more surprising. Just as, some ten years ago, it launched out into its well-known ambitious policy of technological independence, in the wake of England which was then in fact beginning to falter along the road on which it had set out, France is now set on a course very similar to the one Italy has been following since the sixties and the results of which we have just mentioned.

However, there is one notable difference. The Italian authorities proceeded on their course with reluctance, and because they saw no preferable alternative. This is confirmed by the very ambitious Italian projections of public sector GFCAF (cf. Annex I). In France, on the other hand, the decision was freely chosen, a decision which was barely outlined in the Fifth Plan but clearly set out in the Sixth Plan, and the central aim of which seems to be to offset the decline of its political influence by rapidly developing its economic power.

[32] Commission des Communautés européennes. Rapport sur la situation en 1970 p. 258.
[33] This comparison should in no way be construed as a plea for rent control.

Page 584 of Annex IV shows that the ratio of public sector investment to GNP, after regularly increasing—in all by about a third—from 2.5 per cent in 1961 to 3.3 per cent in 1965, became stable at 3.5 per cent.

Similarly, the following table, taken from the report of the Study Group on Medium-Term Economic Prospects--known as the "Wolf Group"—shows that since 1965 the growth rate in public sector investment has fallen by half.

TABLE 3

FRANCE
Average annual growth rate of GNP appropriations

	GNP at market prices	Consumption		GFCAF			
		Private	Public	Total	Dwell-ings	Enterpr. without dwell-ings	Public sector
1960 – 1965	5.8	6.1	3.2	10.1	11.4	8.9	13.5
1965 – 1970	5.8	5.3	3.6	7.7	5.9	8.7	6.6
1970 – 1075[1]	5.7	5.8	3.6	6.3	3.4	7.2	7.3
[2]	5.8 á 6% (P.I.B.)	5.5	4.2			6.8	7.3

[1] Figures taken from the report of the Study Group on Medium-Term Economic Prospects, annex to the Third MTEP programme (p. 104)

[2] *Source* Sixth Plan – Detailed programmes of action, p 585. The figures given here are merely for guidance. Reasoning must be based on the data given in the Third programme, which are the same as those in the Sixth Plan but presented with data for other countries in a manner which is standard for all.

There are many indications, concerning both public sector revenue and expenditure, which combined to underline the change of policy which has gradually come about in France and which culminates, in the Sixth Plan, in an even more definite option in favour of the "Latin type".

With regard, first of all, to public sector investment, it is interesting to compare the two successive projections and the equalization coefficients which can be educed from them; still basing ourselves on the report of the experts of the Wolf Group.

TABLE 4

France
Rate of annual growth in volume

	GNP (1)	Public sector GFCAF (2)	Equalization coefficient $= \frac{(2) \times 100}{(1)}$
Projection for 1965 – 1970	4.8[1]	8.2[1]	170.8
Projection for 1970–1975	5.7	7.0	122.8

[1] Taking the revised national accounts for France into consideration, the up-dated figures are 5.5% and 10.1%.

The medium-term projections for 1970-75 drawn up by the six EEC countries confirm that flexion of French policy has a bearing on overall public demand (consumption) and public sector investment. This is clear from the following table.

TABLE 5

EEC
Public demand on the GNP

Year	Germany	France	Italy	Luxembourg	Netherlands	Belgium
1960	16.7	15.2	15.1	15.2	17.5	14.4
1965	19.6	15.8	16.6	15.0	20.0	15.4
1970	20.2	15.5	15.1	—	21.0	17.3
1975	21.0	15.3	16.7	—	21.1	18.9
% 75/60	+ 25.7%	+ 0.7%	+ 10.6%	–	+ 20.6%	+ 31.3%

It can be seen from this table that, of the EEC countries, only France intends the public sector demand on GNP in 1975 to remain at a level approximately the same as the one it had reached fifteen years previously (Demand by private industry and households is excluded by definition).

Consideration of public financial activities as a whole, including inter alia transfers and social services, in comparison with the GNP, leads to the following basic conclusion: after being the first of the EEC countries in order of GNP allocations to the public sector (including transfers) in 1960, France intends to be the last in 1975.

TABLE 6

Share of GNP assigned to public use

	1960		1975	
	Rate	Order in rank	Rate	Order in rank
Germany	33.0	3	38.8	3
France	33.9	1	38.0	5
Italy	30.7	4	38.3	4
Netherlands	33.5	2	47.9	1
Belgium	29.8	5	39.7	2

The originality of this policy is the more deserving of attention for the fact it follows a concept of public sector financing in regard to which views, particularly those of Germany and of France, are conflicting.

In Germany, the new idea of target-setting programming of public financing, introduced by the Act of 8 June 1967 on economic stability and growth, implies that in any event a degree of development in public sector resources must have priority: that is one of the aims of the public finance programming. It needed some unexpected circumstances, and in a way a case of force majeure for the spirit of that Act to be respected—although in a somewhat perfunctory fashion until 1970 (cf. Annex IV, p. 581). Finally, however, the Federal Republic agreed to what we may call the supreme sacrifice, the revaluation of its currency in order to maintain or restore balance among the main lines of force.

In France, on the other hand, stress is laid increasingly, as in the Sixth Plan, for example, on the "decisive contribution" which the administration of public finance can make to the "moderation of prices, private incomes and trade balance"[34] and even, within limits, to the compensation of laxism in credit policy or to the effort to counter the consequences of monetary under-evaluation.

[34] Introduction, page 38.

In spite of the relatively favourable results in France from 1965 to 1970, so as public sector GFCAF is concerned (cf. Annex I), it would seem that following distinction may be drawn: Germany henceforth seeks to ma its public finance in a manner more directly related to the satisfactio public needs, whereas in France public finance has rather been considered some years as an instrument for the strengthening of industrial power.

TABLE 7

Tax revenue expressed as a percentage of GNP

	Tax Revenue		
	indirect	direct	total
	(1)	(2)	3 = (1) +
Germany (Fed. Rep.)			
1960	13.6	9.3	22.9
1965	13.2	9.9	23.1
1970	12.8	11.0	23.8
1975	12.1	12.0	24.1
France	16.1	6.1	22.2
1965	16.7	6.3	23.0
1970	15.3	7.0	22.3
1975	14.1	7.4	21.5
Italy			
1960	11.3 } 1	5.5	16.8 } 1
1965	10.9	6.4	17.3
1969	10.7	6.9	17.6
1975	10.6	8.7	19.3
Netherlands			
1960	9.8	12.2	22.0
1965	10.0	12.6	22.6
1970	11.4	13.9	25.4
1975	11.4	15.6	27.0
Belgium			
1960	11.4	7.5	18.9
1965	12.0	8.6	20.6
1970	12.9	10.9	23.8
1975	12.0	14.0	26.0

* After deduction of subsidies, 1-2% of which came from the GNP in the sixties.

There is an obvious analogy between the latter feature and the Italian policy of the sixties.

The analogy becomes even more striking if we consider revenue, rather than expenditure, and especially their structure as summarized in the following table taken from the report of the Wolf Group.

The first thing to be noticed is that France is going the opposite direction to its partners: its intention is that by 1975 the pressure of taxation should be less than it was in 1960 (21.5 % as against 22.2 %). This objective is deserving of our attention because there is a link between the pressure of taxation and the development of public sector resources.

Even more significant, however, is the change in direct taxation. Not content with having fallen to the bottom of the league, in 1970, when even Italy overtook it,[35] it fully intends to stay there, and even to reduce its points rating by 1975.[36]

The simplest way of measuring the extra effort which the various countries are prepared to exert to improve the financing of their public sector resources is perhaps to consider that it is equal to their direct tax effort index (EI). The latter effort may be calculated by the following formula:

$$EI = \Delta \, tb$$

where: Δ = the increase in direct taxation over the period considered, and
Tb = the basic rate, i.e. tax rate at the start of the period.

The results, from 1960 to 1975 (projections) are·

—Germany	270
—France	130
—Italy	320
—Netherlands	362
—Belgium	650

It can be seen that two of the "Latin type" countries, especially Belgium, are making real efforts to follow the "Nordic types".[37] France, on the other

[35] The above figure relates to 1969. More recent data show that in 1970 direct taxation in terms of a percentage of GNP was higher in Italy than in France.

[36] This objective is all the more remarkable as it seems rather to contradict the central idea of the Sixth Plan (1970–75), i e industrialization. This, we know, generally goes together with increased taxation, particularly of the direct kind (cf in this respect, the five stages described by H H. Hinrichs in "A General Theory of Tax Structure Change during Development").

[37] The effort in Belgium was probably made easier by the large influx of foreign capital seeking investment in that country, and which acted as a buffer against a trade deficit. The increasing volume of public sector investment thus financed was in part the result of duplications arising from the existence of two languages (e g education, etc)

hand, according to all the indications studied, is characterized by its quasi-immobility, a sort of structural stopper which is even reflected in its projections. Consequently, the gap is increasing between it and its progressing partners, and even between it and Italy, whose course it seems to be drifting into, if not deliberately adopting, at the risk of being punished for its sins tomorrow as Italy is today.

It is possible indeed, that, in the future, economic prosperity will be in the nature of a premium earned by those countries which were able to give first priority to the tangible instruments of higher living standards which are known by the abstract term "public sector investment".

CONCLUSIONS

It is scarcely ten years since the more perspicacious began to understand that the future of western society would depend not only on economic growth but also on the quality of life which developed in that society.

That qualitative aspect of development is closely linked to the available public sector resources: first and foremost on those which, like roads and telecommunications, are essential for private production and consumption; secondly on those which provide the intangible benefits of security, culture and health;[38] and finally those which are daily becoming more necessary for a healthy life without artificial nuisances and for man to re-establish contact with nature. Air, water and other benefits of nature which are free today may be available tomorrow thanks only to costly investments in the public sector.

The rising tide of social needs which will continue to accelerate will demand of every country an enormous effort to adapt which it would be interesting to analyze. However, we can only mention it in passing here, in order to underline those consequences for the Community which may be as demanding as they are productive.

A—Towards a new public finance structure

In the first place, it is highly likely that before the end of the century, in every industrial western country, the share of GNP finding its way into the public coffers will become stable. Fiscal and para-fiscal pressure will in general continue unabated, but in the most advanced countries it is already approach-

38 To show how recent are the generally accepted ideas on the growth of public spending, we need only say that not so long ago there were well-meaning people who were convinced that progress in preventive medicine – vaccination and so forth – would stabilize public health expenditure. So different from reality were expectations of the influence of progress in medical science that no one was surprised in 1942 when Beveridge forecast that the cost of the national health service in Great Britain would not rise before 1965.

ing the tolerable limit. This statement seems to be confirmed by, among other things, the early work of the ECCRSS[39] which suggests that on both sides of the Iron Curtain the share of GNP assigned to public consumption is today comparable.

Moreover, there is every reason to believe that the need for public infrastructure and resources will continue to grow at a much faster pace than the GNP. Let us take an example. Only a few years ago States had to offer subsidies to encourage local authorities to acquire resources and overcome excessive caution in their management. Today, the situation everywhere is quite different. Local elections are won by the provision of schools, swimming-pools and cultural centres, so that the State tries to direct, if not to control, the propensity of local authorities to make investments. Only recently was the political life of one of the member countries almost totally paralyzed for weeks as a *result of a quarrel between two towns about the course of an autoroute.*

The interplay of these conflicting trends will probably lead to profound changes in policy and even in public financial structures. To follow the underlying logic, infrastructures must be distinguished according to the nature of the needs they are intended to satisfy.

1—No notable change is to be expected in infrastructures for administrative purposes of public order, justice and national defence: the impossibility of attributing the benefits of such services to individuals makes it necessary to retain the relevant financing system.

2—Infrastructures for socio-cultural purposes are necessary for physical, intellectual and moral welfare (health, education, culture, leisure activities), and their overall cost increases more rapidly than does the cost of other types of infrastructure, mainly due to the present need for urban resources. The services they provide can generally be attributed to individuals and measured, so that a price can be charged for them. To what extent this technique of financing infrastructures by charging for their services should be adopted will be one of the major questions of future policy in every country.

An apparently irreversible evolution has so far impelled our societies to make socio-cultural services collective. But due to the rising tide of new needs which the market cannot satisfy, it seems difficult to avoid certain changes of dividing lines in a direction opposite to the one we are accustomed to.

For the last century the outstanding feature of the evolution of public financing, particularly in Europe, has been a vast rearrangement of the dividing lines between needs, according to whether they were considered to be within the purview of private enterprise or to be the responsibility in a small or large

[39] Cf page 548 above

degree of the community (education, health, care of the elderly, housing). Since the thirties, it has been the extraordinary expansion of expenditure on social services which has caused the greatest changes in public budgets. Today the limits are in sight. It is probable that social services will have to be more closely adapted to the social condition of the beneficiaries. The time may not be far off when a choice will have to be made between, for instance, the noise abatement campaign and the refunding of dental expenses to some sections of the population, particularly in view of the fact that free service is always costly for someone, and arbitrary decisions favourable to the subsidized consumer but detrimental to the subsidizing taxpayer are often costly for everyone.

Correlatively, it will become necessary in many cases to decentralize administrative activities in order to bring the teller of public funds closer to the object to which those funds are assigned. The principles of budgetary unity and universality are therefore going to be breached ever wider by the need to find new resources and especially to "fleece the lamb without a bleat". The best method of doing so would be to apply to public services, wherever possible, rules similar to those of a market economy, by substituting a selling price for a budget appropriation.

3—That should be the rule for infrastructures for economic uses which are essential to private enterprise and individuals (power supply, transport, communications, etc.). They should in principle be entirely financed by the proceeds of the sale of their services at cost price. This principle should brook no exception other than certain specific cases, for instance with part exemption, that is to say, the price charged to certain categories of users being lower than cost, when this is adopted as a method to bring about reallocation (regional policy) or redistribution (social policy); or full exemption, that is free supply, when such priority is granted to the economic need that its satisfaction must be ensured by the community (e.g. footpaths).

This principle definitely implies the revision of public financing and certain budget operations, one significant example of which we can give. Faced with the sudden enormous demand for telephones in 1969, Great Britain and France decided simultaneously to grant their telecommunications services a wide degree of autonomy. The competent Ministry in Germany drew up a project on the same lines.[40]

The same principle especially concerns the Community in an increasing number of fields of public service where, paradoxically, public funds, so inadequate elsewhere, are, at least in part, wasted. Why? Because they constitute an instrument of international competition within the Common Market. Consider the sea ports and inland waterways, and industrial areas or airports in the frontier regions, and you will see that the credits and subsidies lavished

[40] "Vision", July-August 1971.

upon them act as a sort of concealed protectionist policy seeking to promote national activities to the detriment of the foreign competitor. Since 1968 expenditure of this type has assumed totally unexpected proportions.

That all these excesses continue to be tolerated is contrary to the spirit of the Treaty.

B—The Community's new responsibilities

At the time when the Treaty of Rome was signed, however, the very expression "public sector resources" had scarcely become current with its present acceptation. We can regret that even today the Community has not fully weighed up the new problems which that expression implies. So inadequately has it done so, indeed, after its fourteen years of existence, that the methodical comparison of the state of public infrastructures and resources in the various member countries has even yet not begun.

The important dates in financial history are those of inventories: and this is an inventory which must be undertaken as a matter of urgency.

Preparation for the future is not envisaged either, even in respect of research Eeach member encounters the same difficulties in rationalizing budget alternatives, yet a start has hardly been made to the comparison of experience, and each country duplicates its neighbour's mistakes.

Worse still: free competition, the elimination of trade barriers founded on nationality, nearly always stops at the door of the public sector. The EEC is a very uncommon market so far as the public sector is concerned. Domestic suppliers retain a de facto monopoly for the supply of public sector resources, just as they did in the worst years of protectionism, at no matter what cost to the taxpayer. The collective loss is the greater because public sector investments are already on the increase and will climb more rapidly in the future.

There is even worse to come.

What is the meaning of "to govern"? It means, according to the etymologist, *to set a course, to choose and make for an objective. So far as the infrastruc*tures which are gradually to reform Europe are concerned, the governments of the Six countries, as we have seen, have chosen their objectives and, by a miracle, those objectives are all more or less the same. But they cannot hold *their course and the six countries* continue to drift, carried off by the currents from across the Atlantic.

It would certainly be useful if, as suggested in the first MTEP programme, and like Germany or Belgium recently, the member countries adopted a several-

year programme system for public financing. But that is not enough. If a period of even minor economic stress should occur, the Ministers of Finance, of whatever country and party, would be compelled to cut expenditure on public sector investment. Let the inflationist trend continue as it has for several years, and the financial programming will be reduced to the value of a pious hope.

What has been happening since 1965 in the EEC should surprise no one. As early as 1964 the Currency Committee expressed regret that the monetary policy was powerless to solve the problems of adjustment to combinations of events without increasing support from the budget. It is just as powerless, and even more so, in 1972.

If they wish to escape the constraints to sacrifice their public sector resources, the member countries must face the following alternative: either they must considerably improve the flexibility of their tax systems—and how narrow the latitude for action is in that field is well known; or they must make their monetary policies much more effective—without, however, resort to the methods of protectionism. There is only one way out, namely, the founding of the monetary union or, to be more exact, the economic and monetary union (EMU).[41]

Since 1965, all Member States have been under increasing pressure to lay stress in the "policy-mix" on the instrumental aspect of the budget, because they have been progressively losing their grip on their own monetary situation. The dwindling of this, in principle, sovereign power is related to the increase of the share of foreign trade in contributing to the GNP and, especially, to the predominant influence of the USA in international monetary relations.

That is why it would be absurd to transpose to Europe ideas such as those of Milton Friedman, according to which adjustment to circumstances should be made solely by control of the monetary circulation. Such ideas are notoriously typical of a citizen of a country which has retained mastery of its own style of growth. It is only at the level of the Community that the necessary ways and means may be found for the achievement of comparative autonomy. But it is communally that the Community must give effect of those ways and means.

In other words, it must build up the EMU; not ten years hence, but now. It would have been easier to take the plunge in 1965 than in 1970 or 1972. It will be even more difficult to make the decision in 1970 or 1980.

[41] The aim would be not only the necessary coordination of economic policies, but also the implementation of a genuine community spirit in matters of infrastructure financing in depressed areas, and community budgeting on a considerably greater scale with a view to redressing the structural balance.

First because the mistakes, laziness, retreats and pusillanimity of the past undermine the best of resolutions and jeopardize the future, but especially because, for many years, the results of the member countries' policies on prices, economic structure and public sector resources have been widely dissimilar and even contradictory. And finally, that contradiction will be further aggravated by expansion.

We already knew that the absence of an economic and monetary union was equivalent to a concealed tax burden on the income of every inhabitant of the Community.

We must now recognize that the situation is far worse even than that.

The Common Market, incontestably, has been a powerful factor in the economic progress of the member countries. But due to the very fact that it has not been completed by suitable common policies, it tends more and more to be a structure favourable to the creation of social inequalities.

This is true for the various arrangements for social progress, which are likely to have an adverse effect on productivity and economic competition (working hours and conditions, notably in industry): the more trade among members of the Community develops, the greater the risk of disequilibrium, and the more the members must be circumspect in their dealings with one another.

It is true also of public sector investment, which should nevertheless be given pride of place in government action with a view to improving the quality of life and reducing social disparities. It must indeed never be forgotten that in general it is the poorest and the weakest who suffer most from the inadequacies of public sector resources.

Yet all the experience of the EEC countries *in this field—even of the Netherlands*, which is exemplary in this respect—shows that it is impossible to fulfil in lasting fashion an ambitious programme for public sector resources without acting in a sufficiently broad economic spectrum.

The countries which comprise the EEC cannot, at the national level, escape the constraints which, since 1965, have caused their public resources policies to flounder time after time, nor can they find the ways and means of ensuring a better social policy, unless they retreat to some form of protectionism which, in any case, would for them be a factor of economic regression.

It is a grievous dilemma:

—either continue the EEC in its present *unfinished state, and tolerate year in* year out a strict limitation on action for social progress;
—or revert to protectionism and thereby place in jeopardy the development of the economy itself.

Reconciliation can only be brought about through the Economic and Monetary Union. This is now so clear that it permits of the following three-fold conclusion:

(1) the absence of the EMU means greater social inequality within each member country;
(2) the absence of the EMU means greater inequality between the member countries, that is to say a lesser degree of community among them, unless it be the undesirable form of community described in the third aspect of this conclusion;
(3) the absence of the EMU means greater pollution, bottlenecks and all the other evils to which industrial societies are heir.

For, in the long run, that is what public sector resources mean.

		Overall Product	Consumption		Gross formation of fixed capital assets		
			Private	Public	Total[1]	Private Sector[2]	Public Sector
Germany	: projections 65–70	3.5	3.5	3.1	3.5	3.0	5.5
	achievements 65–70	4.7	4.9	2.2	4.1	4.5	2.0
	projections 70–75	4.5	4.3	5.4	5.0	4.4	6.3
France	: projections 65–70	4.8	4.5	4.5	5.3	5.8	8.2
	achievements 65–70	5.8	5.3	3.6	7.7	8.7	6.6
	projections 70–75	5.7	5.8	3.6	6.3	7.2	7 0
Italy	: projections 65–70	5.0	4.7	5.2	10.1	12.2	18.4
	achievements 65–70	6.0	6.5	3.8	8.1	8.7	4.6
	projections 70–75	6.0	5.5	4.5	8.5	9.1	12.3
Netherlands:	projections 65–70	4.6	4.0	3.1	6.6	5.7	9.8
	achievements 65–70	5.1	5.1	2.4	6.9	8.2	5.2
	projections 70–75	4.6	5.1	1.7	5.6	6.1	5.8
Belgium	: projections 65–70	4.1	3.7	5.6	4.0	4.0	7.5
	achievements 65–70	4.4	4.5	5.1	4.8	7.3	8.6
	projections 70–75	4.8	4.1	4.3	7.0	7.3	9.1
EEC	: projections 65–70	4.3	4.1	4.0	5.5	6.1	8.5
	achievements 65–70	5.2	5.3	3.2	6.1	6.6	4.9
	projections 70–75	5.2	5.1	4.5	6.1	6.1	7.3

[1] Including dwellings

[2] Excluding dwellings, except in Germany (lines 2 and 3).

N B : The data in the above table is taken from the first and third medium-term economic policy programmes. They are not entirely standardized and given only as guidance. It is asserted, however, that the general conclusions to be drawn therefrom unquestionably reflect a true picture. It should be noted, among the treaty disparities, that the overall product:

(i) forecast for 1965–70 (1st programme) was based on GNP at 1960 prices–except for Germany (1965 prices);

(ii) achieved in 1965–70 and forecast for 1970–75 (3rd programme) is based on GNP at 1963 market prices up to 1970 and on 1965 prices thereafter

Coefficients of Equalization (>100) or of Decline (<100) concerning the GFCAF growth in the public sector compared to the growth of the GNP

$$\left(\frac{\Delta \text{ GFCAF (Pub.)}}{\Delta \text{ GNP}} \times 100\right)$$

Germany	projections	65–70	$\frac{5.5 \times 100}{3.5}$	= 157.1
	achieve'ts	65–70	$\frac{2.0 \times 100}{4.7}$	= 42.5
	projections	70–75	$\frac{6.3 \times 100}{4.5}$	= 140.0
France	projections	65–70	$\frac{8.2 \times 100}{4.8}$	= 170.8
	achieve'ts	65–70	$\frac{6.6 \times 100}{5.8}$	= 113.8
	projections	70–75	$\frac{7.0 \times 100}{5.7}$	= 122.8
Italy	projections	65–70	$\frac{18.4 \times 100}{5.0}$	= 368.0
	achieve'ts	65–70	$\frac{4.6 \times 100}{6.0}$	= 76.7
	projections	70–75	$\frac{12.3 \times 100}{6.0}$	= 205.0
Netherlands	projections	65–70	$\frac{9.8 \times 100}{4.6}$	= 213.0
	achieve'ts	65–70	$\frac{5.2 \times 100}{5.1}$	= 102.0
	projections	70–75	$\frac{5.8 \times 100}{4.6}$	= 126.1
Belgium	projections	65–70	$\frac{7.5 \times 100}{4.1}$	= 182.9
	achieve'ts	65–70	$\frac{8.6 \times 100}{4.4}$	= 195.4
	projections	70–75	$\frac{9.1 \times 100}{4.8}$	= 189.6
EEC	projections	65–70	$\frac{8.5 \times 100}{4.3}$	= 197.7
	achieve'ts	65–70	$\frac{4.9 \times 100}{5.2}$	= 94.2
	projections	70–75	$\frac{7.3 \times 100}{5.2}$	= 140.4

EEC

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

Price Index (a): 1963 = 100

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GERMANY (Fed. Rep.)										
– GFCAF in public sector	90.1	95.8	100	101.9	102.1	103.9	101.4	104.4	110.4	126.7
– GNP	93.2	97.0	100	102.8	106 5	110.2	111.6	113.4	117.3	125.8
– (overall GFCAF)	(91.7)	(97.0)	(100)	(102.4)	(105.5)	(108.0)	(106.8)	(107.9)	(112.9)	(125.1)
FRANCE										
– GFCAF in public sector	90.7	93.4	100	104.6	107.2	109.0	111.3	116.0	123.4	131.0
– GNP	90.0	94.3	100	104.0	106.5	109.7	112.8	118.1	127.5	134.6
– (overall GFCAF)	(91.2)	(94.4)	(100)	(104.1)	(107.1)	(109.2)	(112.0)	(115.1)	(121.6)	(130.1)
ITALY										
– GFCAF in public sector	90.6	93.8	100	108.7	115.4	120.9	125.0	128.3	135.6	147.3
– GNP	87.0	92.0	100	106.3	110.4	112.8	116.2	117.9	122.7	130.4
– (overall GFCAF)	(89.2)	(93.0)	(100)	(107.4)	(109.7)	(111.2)	(113.7)	(116.1)	(123.4)	(137.0)
NETHERLANDS										
– GFCAF in public sector	91.8	94.9	100	107.7	113.9	120.9	124.1	128.6	141.1	153.7
– GNP	92.2	95.2	100	108.0	114.3	121.1	126.1	130.6	138.0	144.4
– (overall GFCAF)	(93.7)	(95.6)	(100)	(106.0)	(110.9)	(116.4)	(118.7)	(120.8)	(128.8)	(138.5)
BELGIUM										
– GFCAF in public sector	91.2	94.8	100	106.5	111.6	117.5	125.8	129.6	138.9	153.1
– GNP	96.1	97.2	100	104.7	110.0	114.9	118.3	121.5	126.2	132.7
– (overall GFCAF)	(91.5)	(95.2)	(100)	(106 6)	(111.5)	(115.5)	(120.3)	(123.2)	(128.5)	(140.6)
LUXEMBOURG										
– GFCAF in public sector	.	.	100	.	.	.	.	.	.	.
– GNP	95.5	95.6	100	107.2	110.1	113.7	115.9	120.4	128.5	138.8
– (overall GFCAF)	(88.2)	(92.8)	(100)	(110.8)	(114.6)	(116.9)	(116.7)	(124.7)	(135.3)	(149.5)

Source: OSCE (a) Paasche indices obtained by dividing absolute values at current prices by values calculated at 1963 prices

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

Price index (a): 1963 = 100

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
UNITED KINGDOM										
– GFCAF in public sector	92.9	96.9	100	103.0	106.0	109.6	112.2	115.1	121.2	
– GNP	94.4	98.0	100	103.0	108.0	112.7	116.1	120.9	126.9	
– (overall GFCAF)	95.3	98.0	100	102.4	106.0	109.9	111.3	115.1	120.1	
DENMARK										
– GFCAF in public sector	91.5	94.6	100	103.5	108.9	116.3	121.0	131.3		
– GNP	88.7	94.7	100	104.9	112.4	120.8	127.9	135.1	142.7	
– (overall GFCAF)	82.7	95.8	100	103.4	109.8	114.7	119.9	125.3	131.2	
NORWAY										
– GFCAF in public sector	93.5	97.1	100	101.3	109.9	115.7	120.2	124.4	131.8	
– GNP	94.9	97.6	100	105.5	110.5	115.3	120.0	124.3	128.0	
– (overall GFCAF)	96.9	98.6	100	100.6	106.9	111.0	113.6	119.6	123.8	
IRELAND										
– GFCAF in public sector	100	94.4	100	109.5	105.7	110.7	112.5	.	.	
– GNP	93.2	97.4	100	109.2	114.0	118.2	121.8	126.8	.	
– (overall GFCAF)	94.9	98.0	100	105.9	109.5	112.7	115.7	119.4	.	

Source: OECD: National Accounts

(a) Paasche indices obtained by dividing absolute values at current prices by values calculated at 1963 prices

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^9 DM	11.23	14.02	16.26	19.51	20.19	21.02	18.43	20.60	23.30	29.40
– 1961 = 100	100	125	145	174	180	187	164	183	207	262
– % annual growth	+18.3	+24.8	+16.0	+20.0	+ 3.5	+ 4.1	−12.3	+11.8	+13.1	+26.2.
– % of overall GFCAF	13.4	15.0	16.4	17.2	16.5	16.6	16.1	16.5	15.9	16.2
– % of GNP at current prices	3.4	3.9	4.2	4.6	4.4	4.3	3.7	3.8	3.9	4.3
– NB: net savings in 10^9 DM	(26.09)	(26.48)	(24.89)	(28.76)	(23.06)	(24.50)	(16.43)	(20.29)	(36.67)	(40.86)
B. Central Govt.										
– in 10^9 DM	4.22	5.13	6.02	6.99	7.35	7.46	8.11	7.85	8.80	10.93
– 1961 = 100	100	122	143	166	174	177	192	186	209	259
– % annual growth	+12.2	+21.6	+17.3	+16.1	+ 5.2	+ 1.5	+ 8.7	− 3.2	+12.1	+24.2
– % of overall GFCAF	5.0	5.5	6.1	6.2	6.0	5.9	7.1	6.3	6.0	6.0
– % of GNP at current prices	1.3	1.4	1.6	1.7	1.6	1.5	1.6	1.5	1.5	1.6
– NB: net savings in 10^9 DM	(18.29)	(17.36)	(16.37)	(19.34)	(14.19)	(16.07)	(12.73)	(16.40)	(28.03)	(28.82)
C. Local Authorities										
– in 10^9 DM	6.90	8.71	10.16	12.25	12.68	12.65	11.52	12.06	14.00	16.88
– 1961 = 100	100	126	147	178	184	183	167	175	203	245
– % annual growth	+19.8	+26.2	+16.6	+20.6	+ 3.5	− 0.2	− 8.9	+ 4.7	+16.1	+20.6
– % of overall GFCAF	8.2	9.3	10.3	10.8	10.4	10.0	10.1	9.7	9.6	9.3
– % of GNP at current prices	2.1	2.4	2.6	2.9	2.7	2.6	2.3	2.2	2.3	2.5
– NB: net savings in 10^9 DM	(4.69)	(5.51)	(5.11)	(5.34)	(4.84)	(4.80)	(4.48)	(4.37)	(7.29)	(4.95)
D. Social Security										
– in 10^9 DM	0.11	0.18	0.18	0.17	0.16	0.21	0.24	0.17	0.19	0.20
– 1961 = 100	100	164	164	155	145	191	218	154	173	182
– % annual growth	−42.1	+63.6	—	− 5.6	− 5.9	+31.3	+14.3	−29.2	+11.8	+ 5.2
– % of overall GFCAF	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1
– % of GNP at current prices	0.03	0.05	0.05	0.04	0.03	0.04	0.05	0.03	0.03	0.03
– NB: net savings in 10^9 DM	(3.11)	(3.61)	(3.41)	(4.08)	(4.03)	(3.63)	(−0.78)	(−0.48)	(1.35)	(7.09)

Source: OSCE

BELGIUM
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^9 FB	12.5	14.7	17.5	23.1	21.2	25.5	30.2	35.5	37.0	44.4
– 1961 = 100	100	118	140	185	170	204	242	284	296	355
– % annual growth	+ 14.7	+ 17.6	+ 19.0	+ 32.0	– 8.2	+ 20.3	+ 18.4	+ 17.5	+ 4.2	+ 20.0
– % of overall GFCAF	10.3	10.9	12.3	13.5	11.4	12.5	13.9	16.3	15.4	15.8
– % of GNP at current prices	2.1	2.3	2.5	3.0	2.5	2.8	3.1	3.4	3.2	3.5
– NB: net savings in 10^9 FB	(4.6)	(6.2)	(2.9)	(16.6)	(7.6)	(16.1)	(19.0)	(8.1)	(13.1)	(21.3)
B. Central Govt.										
– in 10^9 FB	5.9	7.9	9.6	13.9	13.3	16.7	19.0	22.5	24.6	28.5
– 1961 = 100	100	134	163	236	225	283	322	381	417	483
– % annual growth	+ 7.3	+ 33.9	+ 21.5	+ 44.8	– 4.3	+ 25.6	+ 13.8	+ 18.4	+ 9.3	+ 15.9
– % of overall GFCAF	4.9	5.9	6.8	8.2	7.2	8.2	8.7	10.3	10.2	10.1
– % of GNP at current prices	1.0	1.2	1.4	1.8	1.6	1.8	1.9	2.2	2.1	2.2
– NB: net savings in 10^9 FB	(– 1.5)	(1.1)	(– 2.7)	(2.5)	(– 1.7)	(3.9)	(4.4)	(– 0.2)	(7.5)	(10.8)
C. Local Authorities										
– in 10^9 FB	6.6	6.6	7.6	8.6	7.1	7.7	9.9	11.7	11.9	15.4
– 1961 = 100	100	100	115	130	108	117	150	177	180	233
– % anuual growth	+ 22.2	—	+ 15.2	+ 13.2	– 17.4	+ 8.5	+ 28.6	+ 18.2	+ 1.7	+ 29.4
– % of overall GFCAF	5.4	4.9	5.3	5.0	3.8	3.8	4.6	5.4	5.0	5.5
– % of GNP at current prices	1.1	1.0	1.1	1.1	0.8	0.8	1.0	1.1	1.0	1.2
– NB: net savings in 10^9 FB	(1.4)	(1.3)	(1.2)	(–0.1)	(0.5)	(3.4)	(4.9)	(4.9)	(2.6)	(2.8)
D. Social Security										
– in 10^9 FB	—	0.2	0.3	0.6	0.8	1.1	1.3	1.3	0.6	0.5
– 1961 = 100	—	100	150	300	400	550	650	650	300	250
– % anuual growth	—	—	+ 50.0	+100.0	+ 33.3	+ 37.5	+ 18.2	—	– 53.8	– 16.7
– % of overall GFCAF	—	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.2	0.2
– % of GNP at current prices	—	0.03	0.04	0.1	0.1	0.1	0.1	0.1	0.05	0.04
– NB: net savings in 10^9 FB	(4.7)	(3.8)	(4.4)	(14.2)	(8.8)	(8.8)	(9.7)	(3.4)	(3.0)	(7.7)

Source: OSCE

DENMARK
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10⁶ Danish crowns	1 616	1 853	1 934	2 359	2 886	3 274	3 981	4 486	5 532	
– 1961 = 100	100	115	120	146	179	203	246	278	342	
– % annual growth	+ 21.1	+ 14.7	+ 4.4	+ 22.0	+ 22.3	+ 13.4	+ 21.6	+ 12.7	+ 23.3	
– % of overall GFCAF	17.2	17.4	17.9	17.3	19.1	20.1	21.8	23.7	24.0	
– % of GNP at current prices	3.5	3.6	3.5	3.8	4.1	4.3	4.7	4.9	5.3	
– NB: net savings in 10⁶ Danish crowns	(1 464)	(2 010)	(2 682)	(3 251)	(3 840)	(4 715)	(3 946)	(5 353)	(5 778)	
B. *Central Govt.*										
– in 10⁶ Danish crowns	501	562	616	682	962	1 134	1 334	1 492	1 600	
– 1961 = 100	100	112	123	136	192	226	266	298	319	
– % annual growth	+ 23.4	+ 21.2	+ 9.6	+ 10.7	+ 41.1	+ 17.9	+ 17.6	+ 11.8	+ 7.2	
– % of overall GFCAF	5.3	5.3	5.7	5.0	6.4	7.0	7.3	7.9	6.9	
– % of GNP at current prices	1.1	1.1	1.1	1.1	1.4	1.5	1.6	1.6	1.5	
– NB: net savings in 10⁶ Danish crowns	(1 252)	(1 838)	(2 091)	(2 453)	(3 032)	(3 621)	(2 794)	(3 681)	(3 440)	
C. Local Authorities										
– in 10⁶ Danish crowns										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10⁶ Danish crowns										
D. Social Security										
– in 10⁶ Danish crowns										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10⁶ Danish crowns										

Source: OECD

FRANCE
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^6 FF	8 254	10 180	12 052	14 329	15 936	17 608	19 973	21 510	24 608	27 698
– 1961 = 100	100	123	146	174	193	213	242	261	298	336
– % annual growth	+ 18.5	+ 23.3	+ 18.4	+ 18.9	+ 11.2	+ 10.5	+ 13.4	+ 7.7	+ 14.4	+ 12.6
– % of overall GFCAF	11.7	12.7	13.2	13.2	13.3	13.3	13.9	13.7	13.4	13.1
– % of GNP at current prices	2.5	2.8	2.9	3.1	3.3	3.3	3.5	3.4	3.4	3.4
– NB: net savings in 10^6 FF	(13 062)	(11 937)	(14 998)	(21 319)	(23 322)	(25 578)	(24 903)	(22 162)	(35 940)	(38 466)
B. Central Govt.										
– in 10^6 FF	2 317	2 936	3 573	4 045	4 747	5 502	6 372	7 159	7 547	8 643
– 1961 = 100	100	127	154	175	205	237	275	309	326	373
– % annual growth	+ 20.3	+ 26.7	+ 21.7	+ 13.2	+ 17.3	+ 15.9	+ 15.8	+ 12.4	+ 5.4	+ 14.5
– % of overall GFCAF	3.3	3.7	3.9	3.7	4.0	4.2	4.4	4.6	4.1	4.1
– % of GNP at current prices	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.0	1.1
– NB: net savings in 10^6 FF	(8 311)	(6 530)	(9 590)	(16 029)	(17 898)	(19 662)	(13 335)	(12 620)	(22 632)	(25 565)
C. Local Authorities										
– in 10^6 FF	5 815	7 084	8 286	10 006	10 856	11 777	13 275	13 984	16 655	18 622
– 1961 = 100	100	122	143	172	187	206	228	241	286	320
– % annual growth	+ 18.4	+ 21.8	+ 17.0	+ 20.8	+ 8.5	+ 8.5	+ 12.7	+ 5.3	+ 19.1	+ 11.8
– % of overall GFCAF	8.2	8.9	9.0	9.2	9.1	8.9	9.2	8.9	9.1	8.8
– % of GNP at current prices	1.8	1.9	2.0	2.2	2.2	2.2	2.3	2.2	2.3	2.3
– NB: net savings in 10^6 FF	(1 953)	(2 645)	(2 695)	(2 913)	(4 088)	(5 295)	(5 569)	(6 451)	(8 058)	(9 199)
D. Social Security										
– in 10^6 FF	122	160	193	278	333	329	326	367	406	433
– 1961 = 100	100	131	158	228	273	270	267	301	333	355
– % annual growth	— 1.6	+ 31.1	+ 20.6	+ 44.0	+ 19.8	— 1.2	— 0.9	+ 12.6	+ 10.6	+ 6.7
– % of overall GFCAF	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2
– % of GNP at current prices	0.04	0.04	0.05	0.06	0.07	0.06	0.06	0.06	0.06	0.05
– NB: net savings in 10^6 FF	(2 768)	(2 762)	(2 713)	(2 377)	(1 336)	(621)	(5 999)	(3 091)	(5 250)	(3 702)

Source: OSCE

IRELAND

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in millions of £	22 2	25.9	30.6	38.5	43.8	41.9	47.8	52.0		
– 1961 = 100	100	117	138	173	197	189	215	234		
– % annual growth	+ 22.0	+ 16.7	+ 18.1	+ 25.8	+ 13.8	– 4.3	+ 14.1	+ 8.8		
– % of overall GFCAF	20.5	20.2	20.6	22.1	22.1	21.4	22.2	20.6		
– % of GNP at current prices	3.1	3.4	3.7	4.1	4.4	4.0	4.2	4.1		
– NB: net savings in millions of £	(– 1.1)	(– 1.1)	(3.6)	(3.1)	(3.6)	(15.9)	(17.7)	(16.0)		
B. Central Govt.										
– in millions of £	9.1	11.5	13.4	16.1	17.5	15.7	16.2	18.0		
– 1961 = 100	100	126	147	177	192	173	178	198		
– % annual growth	+ 16.7	+ 26.4	+ 16.5	+ 20.1	+ 8.7	– 10.3	+ 3.2	+ 11.1		
– % of overall GFCAF	8.4	9.0	9.0	9.2	8.8	8.0	7.5	7.1		
– % of GNP at current prices	1.3	1.5	1.6	1.7	1.7	1.5	1.4	1.4		
– NB: net savings in millions of £	(– 0.2)	(– 0.5)	(3.5)	(5.7)	(4.4)	(16.3)	(15.0)	(17.0)		
C. Local Authorities										
– in millions of £										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in millions of £										
D. Social Security										
– in millions of £										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in millions of £										

Source: OECD

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10⁹ Lire	709.9	757.3	837.6	978.3	938.5	1 013.7	987.4	1 189.3	1 212.8	1 373.9
– 1961 = 100	100	107	118	138	132	143	139	168	171	194
– % annual growth	+ 4.1	+ 6.7	+ 10.6	+ 16.8	– 4.1	+ 8.0	– 2.6	+ 20.4	+ 2.0	+ 13.3
– % of overall GFCAF	12.9	12.0	11.4	13.2	13.6	13.9	11.9	12.8	11.3	11.1
– % of GNP at current prices	2.9	2.8	2.7	2.9	2.6	2.6	2.3	2.5	2.3	2.4
– NB: net savings in 10⁹ Lire	(909.1)	(970.5)	(953.9)	(1 178.1)	(244.4)	(117.3)	(877.1)	(620.6)	(387.3)	(416.6)
B. Central Govt.										
– in 10⁹ Lire	280.7	327.0	334.7	355.3	325.3	328.0	371.2	475.4	462.0	558.7
– 1961 = 100	100	117	119	127	116	117	132	169	165	199
– % annual growth	+ 2.5	+ 16.5	+ 2.4	+ 6.2	– 8.4	+ 0.1	+ 13.2	+ 28.1	– 2.8	+ 20.9
– % of overall GFCAF	5.1	5.2	4.5	4.8	4.7	4.5	4.5	5.1	4.3	4.5
– % of GNP at current prices	1.2	1.2	1.1	1.0	0.9	0.8	0.9	1.0	0.9	1.0
– NB: net savings in 10⁹ Lire	(705.6)	(786.4)	(617.6)	(789.3)	(163.8)	(363.4)	(208.4)	(641.0)	(438.3)	(578.3)
C. Local Authorities										
– in 10⁹ Lire	331.1	358.4	410.1	497.0	516.6	522.6	518.9	528.2	581.0	597.2
– 1961 = 100	100	108	124	150	156	158	157	160	176	180
– % annual growth	+ 3.7	+ 8.2	+ 14.4	+ 21.2	+ 3.9	+ 1.2	– 0.7	+ 1.8	+ 10.0	+ 2.8
– % of overall GFCAF	6.0	5.7	5.6	6.7	7.5	7.2	6.2	6.7	5.4	4.8
– % of GNP at current prices	1.4	1.3	1.3	1.5	1.4	1.3	1.2	1.1	1.1	1.0
– NB: net savings in 10⁹ Lire	(– 35.0)	(– 78.3)	(–155.2)	(–248.1)	(–167.6)	(–297.1)	(–187.5)	(–229.1)	(–318.6)	(–284.5)
D. Social Security										
– in 10⁹ Lire	40.2	52.9	63.0	66.0	62.2	101.1	98.9	104.0	111.0	110.4
– 1961 = 100	100	132	157	164	155	252	246	259	276	275
– % annual growth	– 12.4	+ 31.6	+ 19.1	+ 4.8	– 5.8	+ 62.5	– 2.2	+ 5.2	+ 6.7	– 0.5
– % of overall GFCAF	0.7	0.8	0.9	0.9	0.9	1.4	1.2	1.1	1.0	0.9
– % of GNP at current prices	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
– NB: net savings in 10⁹ Lire	(238.5)	(262.4)	(491.5)	(636.9)	(248.2)	(51.0)	(–143.8)	(208.7)	(267.6)	(122.8)

Source: OSCE

LUXEMBOURG
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^6 Flux	1 160	1 460	1 271	1 482	1 308	1 445	1 489	1 810	1 733	
– 1961 = 100	100	126	110	128	113	125	128	156	149	
– % annual growth	– 5.6	+ 25.9	– 12.9	+ 16.6	– 11.7	+ 10.5	+ 3.0	+ 21.6	– 4.3	
– % of overall GFCAF	18.3	20.5	14.4	13.1	13.3	14.7	16.8	20.2	16.6	
– % of GNP at current prices	4.6	5.7	4.6	4.7	3.9	4.2	4.2	4.7	3.9	
– NB: net savings in 10^6 Flux.	(2 148)	(1 615)	(1 404)	(1 749)	(1 864)	(1 635)	(765)	(658)	(1 809)	
B. Central Govt.										
– in 10^6 Flux.										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^6 Flux										
C. Local Authorities										
– in 10^6 Flux.										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^6 Flux										
D. Social Security										
– in 10^6 Flux.										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^6 Flux.										

Source: OSCE

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^6 Norwegian crowns	1 192	1 415	1 706	1 960	2 069	2 277	2 727	2 859	3 102	
– 1961 = 100	100	119	143	164	174	191	229	240	260	
– % annual growth	+ 2.5	+ 18.7	+ 20.6	+ 14.9	+ 5.6	+ 10.1	+ 19.8	+ 4.8	+ 8.5	
– % of overall GFCAF	11.3	12.6	13.8	15.3	14.3	14.3	15.0	16.4	17.6	
– % of GNP at current prices	3.4	3.7	4.2	4.3	4.1	4.2	4.5	4.4	4.5	
– NB: net savings in 10^6 Norwegian crowns	(2 691)	(2 871)	(2 623)	(2 765)	(2 965)	(3 715)	(4 452)	(4 315)	(4 391)	
B. Central Govt.										
– in 10^6 Norwegian crowns	411	493	568	679	742	814	977	1 006	1 193	
– 1961 = 100	100	120	138	165	181	198	238	245	290	
– % annual growth	+ 2.0	+ 20.0	+ 15.2	+ 19.5	+ 9.3	+ 9.7	+ 20.0	+ 3.0	+ 18.6	
– % of overall GFCAF	3.9	4.4	4.6	5.3	5.1	5.1	5.4	5.8	6.8	
– % of GNP at current prices	1.2	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.7	
– NB: savings in 10^6 Norwegian crowns	(1 746)	(1 869)	(1 693)	(1 923)	(1 917)	(2 567)	(3 262)	(3 007)	(3 067)	
C. Local Authorities										
– in 10^6 Norwegian crowns										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^6 Norwegian crowns										
D. Social Security										
– in 10^6 Norwegians crowns										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^6 Norwegian crowns										

Source: OCDE

NETHERLANDS
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^6 FL	1 947	2 164	2 483	2 993	3 236	3 567	4 047	4 823	5 180	5 610
– 1961 = 100	100	111	128	154	166	183	208	248	266	288
– % annual growth	+11.3	+11.1	+14.7	+20.5	+ 8.1	+10.2	+13.5	+19.2	+7.4	+8.3
– % of overall GFCAF	17.8	18.6	20.0	19.3	19.1	18.4	19.0	20.0	20.1	18.9
– % of GNP at current prices	4.3	4.5	4.7	4.8	4.7	4.7	4.9	5.2	5.0	5.0
– NB: net savings in 10^6 FL	(2 555)	(2 093)	(1 781)	(2 073)	(2 615)	(2 940)	(3 067)	(4 222)	(4 930)	(5 720)
B. Central Govt.										
– in 10^6 FL	640	619	705	796	934	1 040	1 178	1 410	1 560	1 770
– 1961 = 100	100	97	110	124	146	163	184	220	244	277
– % annual growth	+31.7	−3.3	+13.9	+12.9	+17.3	+11.3	+13.3	+19.7	+10.6	+13.5
– % of overall GFCAF	5.9	5.3	5.7	5.1	5.5	5.4	5.5	5.8	6.1	6.0
– % of GNP at current prices	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
– NB: net savings in 10^6 FL	(2 077)	(1 882)	(1 895)	(2 189)	(2 337)	(2 869)	(3 247)	(3 459)	(4 100)	(4 320)
C. Local Authorities										
– in 10^6 FL	1 307	1 545	1 778	2 197	2 302	2 527	2 869	3 413	3 620	3 840
– 1961 = 100	100	118	136	168	176	193	220	261	277	294
– % annual growth	+ 3.4	+ 18.2	+ 15.1	+ 23.6	+ 4.8	+ 9.8	+ 13.5	+ 19.0	+ 6.1	+ 6.1
– % of overall GFCAF	12.0	13.3	14.3	14.2	13.6	13.0	13.5	14.2	14.0	12.9
– % of GNP at current prices	2.9	3.2	3.4	3.5	3.3	3.3	3.5	3.7	3.5	3.4
– NB: net savings in 10^6 FL	(112)	(91)	(– 149)	(– 246)	(87)	(– 57)	(– 372)	(11)	(70)	(690)
D. Social Security										
– in 10^6 FL	—	—	—	—	—	—	—	—	—	—
– 1961 = 100	—	—	—	—	—	—	—	—	—	—
– % annual growth	—	—	—	—	—	—	—	—	—	—
– % of overall GFCAF	—	—	—	—	—	—	—	—	—	—
– % of GNP at current prices	—	—	—	—	—	—	—	—	—	—
– NB: net savings in 10^6 FL	(366)	(120)	(35)	(130)	(191)	(128)	(192)	(752)	(760)	(710)

Source: OSCE

Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in millions of £	919	1 029	1 108	1 393	1 483	1 678	1 960	2 168	2 210	2 393
– 1961 = 100	100	112	121	152	161	183	213	236	240	261
– % annual growth	+ 6.9	+ 12.0	+ 7.7	+ 25.7	+ 6.5	+ 13.1	+ 16.8	+ 10.6	+ 1.9	+ 8.4
– % of overall GFCAF	19.9	21.7	22.6	23.8	23.5	25.0	27.0	27.5	27.2	27.0
– % of GNP at current prices	3.4	3.6	3.6	4.1	4.1	4.4	4.9	5.0	4.9	4.8
– NB: net savings in millions of £	232	570	171	473	798	1 221	1 010	1 733	2 843	
B. Central Govt.[1]										
– in millions of £	217	215	225	281	298	333	392	456	486	576
– 1961 = 100	100	99	104	130	137	153	181	210	224	265
– % annual growth	– 15.2	– 0.9	+ 4.7	+ 24.9	+ 6.0	+ 11.7	+ 17.7	+ 16.3	+ 6.6	+ 18.5
– % of overall GFCAF	4.7	4.5	4.6	4.8	4.7	5.0	5.4	5.8	6.0	6.5
– % of GNP at current prices	0.8	0.8	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1
– NB: net savings in millions of £	251	548	193	386	752	1 109	1 025	1 713	2 882	
C. Local Authorities										
– in millions of £	702	814	883	1 112	1 185	1 345	1 568	1 712	1 724	1 819
– 1961 = 100	100	116	126	158	169	192	223	244	246	259
– % annual growth	+ 16.2	+ 15.9	+ 8.5	+ 25.9	+ 6.6	+ 13.5	+ 16.6	+ 9.2	+ 0.7	+ 5.5
– % of overall GFCAF	15.2	17.2	18.0	19.0	18.8	20.0	21.6	21.7	21.2	20.5
– % of GNP at current prices	2.6	2.8	2.9	3.3	3.3	3.5	3.9	4.0	3.8	3.7
– NB: net savings in millions of £	– 19	22	– 22	87	46	112	— 15	20	— 39	
D. Social Security										
– in millions of £										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in millions of £										

Source: OECD and Nat.: nic. and Exp. 1971

[1] Including Social Security

USA
Gross Formation of Fixed Capital Assets (GFCAF) in the Public Sector

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
– in 10^9 $	16.1	16.9	18.2	19.8	21.5	23.7	25.2	27.1	27.4	
– 1961 = 100	100	105	113	123	134	147	157	168	170	
– % annual growth	+ 9.5	+ 5.0	+ 7.7	+ 8.8	+ 8.6	+ 10.2	+ 6.3	+ 7.5	+ 1.1	
– % of overall GFCAF	18.8	18.0	18.3	18.3	17.9	18.2	18.9	18.5	17.3	
– % of GNP at current prices	3.0	3.0	3.0	3.2	3.1	3.1	3.1	3.1	2.9	
– NB: net savings in 10^9 $	*(5.1)*	*(7.9)*	*(13.1)*	*(10.0)*	*(14.4)*	*(12.5)*	*(– 0.4)*	*(10.3)*	*(25.1)*	
B. Central Govt.										
– in 10^9 $	2.3	2.5	2.4	2.6	2.7	2.8	2.4	2.1	1.9	
– 1961 = 100	100	109	104	113	117	122	104	91	83	
– % annual growth	+ 15.0	+ 8.7	– 4.0	+ 8.3	+ 3.8	+ 3.7	– 14.3	– 12.5	– 9.5	
– % of overall GFCAF	2.7	2.7	2.4	2.4	2.3	2.1	1.8	1.4	1.2	
– of GNP at current prices	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	
– NB: net savings in 10^9 $	(– 1.8)	(– 2.8)	(– 0.5)	(– 5.1)	(– 0.4)	(– 8.6)	(–17.8)	(— 8.5)	(– 3.3)	
C. Local Authorities										
– in 10^9 $										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^9 $										
D. Social Security										
– in 10^9 $										
– 1961 = 100										
– % annual growth										
– % of overall GFCAF										
– % of GNP at current prices										
– NB: net savings in 10^9 $										

Source: OECD – National Accounts

Variation coefficients of public sector GFCAF and of GNP (1961-70)

	σ	χ	$\frac{\sigma}{\chi}$
A. Gross formation of fixed capital assets			
Germany	7.75	7.9	0.98
France	4.58	10.5	0.44
Italy	7.14	4.3	1.66
Netherlands	5.30	6.7	0.79
Belgium	9.60	9.6	1
Luxembourg	.	.	.
United Kingdom[1]	6.8	11.7	0.58
B. Gross national product			
Germany	2.29	4.9	0.47
France	0.94	5.8	0.19
Italy	1.43	5.7	0.25
Netherlands	1.75	5.2	0.34
Belgium	1.29	4.9	0.26
Luxembourg[1]	2.4	3.4	0.71
United Kingdom[1]	1.32	2.8	0.47

[1] *1961–69*

The following conclusions may be drawn.

1. *Average*

On the whole, the GNP is increasing in quantity by an average of 5 per cent per annum in the EEC countries, with the exception of Luxembourg, and by 3 per cent in the United Kingdom. Over the same period, the GFCAF increased by 5-10 per cent, and even by nearly 12 per cent in the United Kingdom.

2. *Standard gap*

The GNP standard gap represents, depending on the country, one fifth to one-half of the average, which shows a relative concentration of the growth rate about the average. On the other hand, the GFCAF shows much larger variations, the standard gap being between one-half and two-thirds of the average, which reflects some very wide variations.

INDUSTRIAL DEVELOPMENT, COLLECTIVE NEEDS AND QUALITY OF LIFE (*)

Summary by the Chairman of group II Mr BARRE
Vice-President of the Commission of the European Communities

Mr Chairman, Ladies and Gentlemen,

The subject assigned to Working Party Two, of which I have the honour to be the chairman, was industrial development, the collective requirements and the quality of life. The Working Party went about its task with a dual aim: first, to analyse as specifically and accurately as possible the various aspects of its allotted subject, so as to avoid the general propositions which are always tempting but so rarely of any practical use; and secondly, to try to arrive at some conclusions and proposals for action.

The discussions revealed a fairly general convergence of views on the objectives to pursue; when we come to the ways and means of taking action, however, there are some areas of agreement, but there are also divergent views. The chief reason for this is that certain members of the Working Party accepted and desired an adjustment of the overall social system as it exists in our countries, whereas others maintained that the system must be transformed. In the account I wish to give you of these discussions, it will not be possible to do justice to all the ideas expressed by the rapporteurs and other speakers, and I ask them to forgive me if I do not refer directly to their comments or their proposals. I have tried to make my summary of the work as objective as possible; I accept the responsibility for it, of course, and I ask the members of Working Party Two to pardon, if not the errors, at any rate the shades of emphasis that I may introduce into this report. I have done my best, however, not to misrepresent what was said.

The first subject concerned the overall prospects of social development and the options for the future. As a starting point, we considered the rise in collective needs which was the focal point of our discussions. Before anything else, however, we had to be sure what we were talking about. It emerged from the discussions that these collective needs are actually individual needs, since they concern the satisfaction of individual people, but that they cannot be satisfied by decisions and expenditure on the part of individuals, but only be collective decisions and expenditure.

Three types of collective need can be seen in modern society: the very old, one might say traditional, need for administrative management of society and for

* Translated from the French.

security; needs connected with the economic activities of individuals and undertakings, such as communications or energy transport; and lastly, social and cultural needs, such as the requirements of health, education, culture and leisure. Thus in the mounting of collective needs we see a new dimension of human action appearing in present-day society—the search for a better quality of life.

In this connection two fundamental observations have been made: specifically, the quality of life depends on care for the human environment in all its aspects and not simply on anti-pollution measures. Secondly, this is an economic problem, but it is also a social and political problem, in two senses. First, we must recognize that the relations between social groups are not peaceful relations; they express ratios of force. Secondly, as Mr Ruffolo has very well expressed it economic development generates a wish to participate. "To say," wrote Mr Ruffolo, "that this intensified urge to participate is an upsurge of the demand for social services is only a half-truth; the problem is also one of adjustment and distribution of power in society."

If we look at the present situation and prospects in the light of all these comments, I think we can reach the following conclusions. In the first place, our society is looking for a new type of development, by which I mean an ordered economic, social and human development. In spite of certain intellectual fashions, which will pass away like all fashions, growth has never been challenged for the good reason that it is essential. The problem lies in the conditions of growth and the use that is made of the surplus available resources. Growth in quantity is a means and not an end in itself, but without any growth the ends aimed at would not be achieved.

In the second place, our society needs both economic and social planning; the plan must be drawn up with due regard to the intimate interactions between these two fields, and must be conceived not only at the national level but, in a Community like our own, at the Community level. Thirdly, the type of development that looks desirable in our present-day society, while certainly presupposing some rationalization of the economic and social decisions and of economic and social management, also calls for increasing democratization in both decision-making and management. This would avoid the evil effects of centralism and bureaucracy which have been unanimously resented and denounced. Instead of development in uniformity we should have development in diversity, enabling groups and individuals to use their initiative and shoulder their responsibilities. In this connection I should like to say to this conference and its organizers that two social groups expressed, through their representatives, the wish to be more closely associated with the studies we were engaged upon; one is the executive class, whose weight in modern society is well known, and the other is the craftsman, who might seem to have no place in present day structures, but when they are no longer with us we realize how useful they were.

Briefly, on the first subject Working Party Two came to the conclusion that a new type of development was necessary, a new type of economic and social policy should be devised, and a new type of social relationship should be established. Thus examination of the problem of collective needs finally led to an overall view of the motives and actions which inspire and must guide modern society.

The foregoing considerations account for the conclusions reached by the Working Party concerning the ways in which action for a better environment will affect industrial development and the siting of industrial establishments. For this was the subject our Working Party was to investigate. The first thing I would like you to know is that all the members of the Working Party stressed the point that industrialization was necessary but that industry must not determine the pattern of society as was the case in the 19th century and, indeed, up to recent times, depending on the level of development attained by different countries. On the contrary, it is society which, in keeping with its aims, must make industry conform to certain rules and certain disciplines. Secondly, it became clear in the course of our discussions that industry is not the only guilty party in the desecration of the environment, whatever responsibility it may bear in this domain, from the standpoint of its production processes and also from that of its products and the consequences of using them. The fact is that in our modern society everyone does something to spoil the environment; hence environmental policy must be a collective matter, a conscious effort by all concerned. It is then obvious that the public needs full, objective information on environmental problems and that citizens must be educated in these matters; and this education, it is suggested, ought even to start at school.

Another point is that it might be a good thing if systematic measures of notification on pollution or environmental problems were applied in individual cases. In this connection I would mention one useful and important suggestion, namely, that preliminary surveys should be published before polluting undertakings are set up in a given area. This informing, or educating, process will be the more successful if really thorough surveys can be used, and here particular stress was laid on the role of the Community.

Two specific suggestions were made, amongst many others. First, interdisciplinary research on ecology, town and country planning, and anti-pollution and technology ought to be encouraged. The projects could be based on national and Community programmes, then harmonized, and finally carried out at national centres which would be interlinked. They could to some extent be administered by an ad hoc European Centre, and it has been suggested that the European Institute at Florence, which will be set up shortly, could organize and research work.

Secondly, alongside this interdisciplinary research, attention was also drawn

to the need for more precise studies on what one of the speakers called the aggregate costs, that is, the direct costs plus the external and social costs of the projects undertaken in our various countries.

But action is needed as well as studies, and it was thought that here national governments could take a hand. They could, for instance, introduce legal prohibitions in all cases where it has become evident that the protection or improvement of the environment requires such prohibitions and incentives to make industrial activities take due account of the obligation to conserve the environment. In particular, in countries where industrialization still has to develop, steps can be taken to ensure that this new dimension is taken into account in industrial siting plans. The incentives could take the form of credits, subsidies or tax relief. One rapporteur, Mr Jurgensen, in a much appreciated paper, proposed that direct taxation on the emission of pollution units should be considered, and other members asked that firms be obliged to include anti-pollution devices in both their new and their existing plants.

In such a field as this, the national authorities cannot act independently of one another. For that reason the Working Party concluded that it would be advisable to bring the different countries' laws into line within the Community, or perhaps in a wider context with the Community participating as such. It was recognized that a flexible approach was necessary here to allow for the fact that the ecological situations and the needs for environmental conservation vary from country to country and even from area to area in each country. It was also pointed out that harmonization of laws must avoid distorting the conditions of competition inside the Community, although a better siting of resources might seem to dispel the anxieties concerning such distortions. Lastly, it was noted that the harmonization process should be accompanied by provisions safeguarding, where necessary, the Community countries' ability to compete on the world scale where disparity in policy is too wide between the various countries or the various economic and industrial groupings in the world.

This, then, is the list of conclusions on which I think a minimum of agreement at any rate was reached among the Working Party—information, education, interdisciplinary and specific studies, coordinated national action, approximation and harmonization of the national laws, and the implementing of joint action on the basis of specific projects.

It was stated, for instance, that an agreement among the countries bordering the Mediterranean on pollution by hydrocarbons could lead to quick and efficacious results and would not involve excessive costs. Summing up on this second subject, I should like to quote a formula employed by Mr Petrilli, who said: "Technology can solve the problems raised by technology. All that is needed is a demonstration of political resolve." This, of course, is the conclusion reached by the Working Party, because there must be a political will able

to overcome resistance and to withstand pressure from private or sectoral interests.

So I come to the last point, the financing of the infrastructures, which is bound up with the satisfying of the collective needs. Thus we are brought back to hard facts; for, in the ultimate, long or broad views always come up against the constraints of a world in which resources are scanty.

As regards the financing of the infrastructures, it should be analysed at two levels: on one hand, that of the problems of financing technique, and on the other hand the economic level.

With reference to the problems of financing technique, the general opinion was that the financing of infrastructures for administrative purposes must normally come out of taxes. As regards infrastructures for economic purposes, used for the activities of enterprises and individuals (energy, transport and communications), there was no objection to the services provided by these infrastructures being sold to the interested parties at their actual cost, with perhaps a partial and restricted exception where it is a question of pursuing a number of territorial or social objectives, provided, of course, that such exceptions are limited in time. As to the infrastructures for social and cultural purposes, it emerged that collective financing would rapidly become impossible through the piling-up of requirements if a certain number of choices were not exercised and a certain redistribution of the burden effected. There again, it was found that the financing would wherever possible have to take the form of charging a price for the service rendered. Other suggestions were made, including recourse to the capital market—and those who are pessimistic as to the long-term trend of the capital market might consider what was termed a legal system of savings as a means of financing these infrastructure expenditures. In any case, this emerged as a major political problem which calls for political decisions on a country-wide scale and which above all demands responsible behaviour on the part of the population. The stress laid on the principle of responsibility was sufficient to warrant my mentioning it here, not only as regards its financial but also with respect to its political applications.

The other level at which financing problems arise is an economic one. It is the ratio between the drawings on the available resources and the total quantity of these resources. As soon as one tackles this question, one is struck by a number of implications. In the first place, simply because of the rise in collective needs, the available resources must likewise increase. Secondly, one must choose between the satisfying of private and collective needs, not by cutting back on private needs in favour of collective needs, but by not satisfying the former as quickly as the latter. The necessity of lucid financial planning was also recognized, the background here being the need for non-inflationary expansion of the economy, based on an orderly growth of incomes. And I mean of all incomes, for experience in Europe has shown that "stop-

go" procedures always result in a cutdown, unfortunately inevitable, of public funds earmarked for satisfying collective needs.

Thus we see that growth and stability are necessary for carrying out a consistent, durable programme of increasing the infrastructures inherent in the *satisfaction of collective needs.*

Lastly, it was pointed out that action by the Community as a powerful entity could be very helpful, *if not essential to the solution of* some problems, particularly in the context of the Economic and Monetary Union, which, as well as being a set of provisions aimed at coordinating the national economic and monetary policies of the countries in the Union, is also a *common front*, operating through a Community budget with sufficient resources to intervene more actively in fields of interest to the Community.

These, Ladies and Gentlemen, are the conclusions I wished to report on the completion of the tasks assigned to Working Party Two. What we have accomplished serves to demonstrate the economic, financial and political size of the problems to be solved.

Allow me to add the following reflections, speaking both personally and as chairman of this Working Party. It is easy, perhaps too easy, to make sweeping proposals to present-day society on the pursuit of happiness, even in national and general terms. It is more difficult to hold people's attention and win support when one points out the basic conditions for achievement of the aims in view. Yet this is what is required of a policy in the fullest and most sublime sense of the word. What is clear is that everyone will have to do his bit if we are to achieve a more equitable, more prosperous society, that is to say, a society in which the dignity of man is respected to the full. If the people attain happiness as well, so much the better, I thank you.

PART III

The Community in the World

(Group 3)

AIMS AND MEANS OF A EUROPEAN POLICY ON TECHNOLOGICAL DEVELOPMENT

by

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AIMS AND MEANS OF A EUROPEAN POLICY ON TECHNOLOGICAL DEVELOPMENT(*)

L. BÖLKOW

A critical review of the proposals, discussions and decisions published during the last decade in the various European countries on the subject of "Technological Development" reveals considerable confusion of definitions. Clear definitions are needed, however, in any discussion which controls or influences technological progress because the European community has arrived at an important threshold and because the survival of this community depends to a substantial degree upon technology.

Furthermore, it is most important that the inter-relationship of technological progress and the economic and sociological goals of the European community are clearly recognized, and that we make increasing attempts at utilizing the abstract methods which have resulted from the logic of technology and science when defining our goals.

In view of these facts I will concentrate, in this paper, on the methodology or, if you will, on the tools which form the basis upon which our work towards a policy for the future rests. Only those who recognize the logic of these inter-relationships are in a position to continuously check and recheck their work and decisions concerning the applicability and realism not only for the present but also for the future. For our emerging European economic community nothing would be more dangerous than intuitive goals strongly influenced by short term expectations of success.

Technology and Development

"Technological Development" defines the progress of the mental, the abstract tools (soft ware) as well as the physical tools (hardware). During the future world-wide economic and social competition to which the European Community is already exposed and will be increasingly exposed, the chance of survival, of maintaining and improving the quality of life will depend upon the technological state of art.

It is in two different ways that technology shows up in engineering, in economy and in the formation of social relationships:

(i) Once as a means to create new technical products or to the improve the

(*) Translated from the German.

quality of existing products for the satisfaction of desires and for the necessities of society both in the narrow and in the wide sense.

(ii) Second, as a means to manufacture these products.

In spite of the urgent necessity to increase our manufacturing productivity compared to, e.g., the United States by a substantial amount I shall neglect this side due to limitations of time and because this is very much a problem of organization, of management and of the production numbers along with the technological means, that is tools and their utilization.

Let me enumerate a number of factors and theses which will clarify what I mean by "policy" in the area of technological development before I enter into discussion of goals and means of a European policy:

(1) *There is no "natural urge" to improve existing technology*

There is no inner motivation to improve the tools, i.e. the technology, which would be similar to basic research where the individual, the single human being, follows an inherent urge residing within himself and causing him to drive forward in exploring the micro and macro cosmic relationship existing in the world.

(2) *New technology results from solution of tasks by the engineering community*

New advanced technology is not the result of a preconceived "Technology Research or Development" but rather the result which falls out of finding technical solutions to established goals. The most essential part of policy is therefore the establishment of such demanding development goals.

(3) *Acquisition of technology existing in other economic communities (licence production)*

It is perfectly obvious that an attempt must be made to acquire a recognizably higher state of technology in the way of licences from other economic communities whenever such is available. It should not be forgotten, however, that this leads automatically to a mental and consequently economic dependence. Oneself becomes unproductive and this sets a process in motion which, step by step, leads to the loss of creative capability.

To recognize this and take the necessary countermeasures is not an issue for the individual industrial enterprise but for centralized planning at the political level of our economic community.

(4) *Technology and engineering are not purposes unto themselves*

Progress in technology for its own sake has no justification. Engineering and consequently its technology, i.e. its tools, serve the community. If progress, as defined above, can only be achieved through the reduction to practice of demanding requirements, then it is an absolute prerequisite in the formulation of requirements and tasks that they must serve the goals of society.

The search for and definition of such goals, the description of the optimum way towards their realization and a clear definition of tasks for technological development is only possible nowadays by use of modern, essentially abstract planning methods because the state of the art is already high and society is growing increasingly more complex.

Limiting conditions of a European policy in the area of technological development

In view of the long term nature and the complexity of the establishment of European goals and targets it is necessary to explore the specifically European limiting conditions prior to attempting to formulate those targets.

(1) *Tradition*

In the area of modern technology, Europe has, compared to all other countries, historically the longest tradition. This leads not only to the positive effect of a great diversity of thought resulting from the individual colour of Europe's regions and of a great continuity and stability based on Europe's long history but it also has the negative effect of excessive ties to cultural patterns when compared to the rest of the world.

(2) *Europe in the world*

Europe is imbedded in an economic, political, sociological and military competitive situation between Eastern Asia, the USSR and the USA. We are not free in our decisions regarding the policy of our technical developments. Competition often forces us to set targets and goals which we would prefer, in view of other more urgent problems, to solve at a later time if we were entirely free and could decide exclusively on the basis of internal European view points. The most applicable example in this area is space technology with its by-products such as communication and television satellites or satellites for weather observation and navigation.

(3) *Raw materials*

In the past Europe's industrial predominance was partially based upon its own

supply of coal as a basis for industrial energy and for the production of steel. Coal is no longer produced economically in Europe in comparison to the USA. It has therefore become necessary to import from areas with substantially better mining conditions. Moreover Europe must import substantial additional raw materials as e.g. oil, nuclear fuels, rare minerals etc. and this list includes almost all important industrial raw materials with the exception of plastics.

(4) *Shift of technology trends*

An increasing number of products which are still exported from Europe today will soon be produced by the rest of the world itself as a result of the reduction of our technological lead. Social, economic and political reasons will contribute to this trends towards local manufacture.

(5) *Development of population*

The reduction of the birth rate in central Europe and the increase of the average life expectancy must be considered in future predictions. This is particularly important if our European economic region will have to syphon off large and possible increasing amounts for investment to the rest of the world in an effort to achieve structural improvements.

(6) *Standard of living and productivity*

Increasing demands for a higher standard of living and the requirements of different political groups which are aiming at a modification of the existing social structure have led to an increase in operating costs, particularly in the cost of labor and to modifications of the baseline. We must never overlook these frequently inescapable changes in our social life and their effect upon the maintenance of our competitive position which is one of the pillars of this very social life itself. This observation becomes particularly obvious when we compare the productivity of Europe in many manufacturing areas where it is lagging far behind in comparison to the United States.

(7) *Being fed-up with technology*

This movement began in the United States and we can now observe in Europe a certain degree of tiredness vs. technology if not out-right hostility. This trend will certainly not make it easier to search for new goals and targets to provide the necessary means to achieve them.

(8) *The industrial saturation process*

The economic and technological processes which had their origin in the transition of rural societies into industrial societies is already showing signs of

saturation in many areas, with more to come. In different regions of Europe these are not all happening at the same time. First warning signals are e.g. the number of automobiles in the cities, the ever increasing life span of the products, the concentration of population in the industrial areas, the stagnations of utilization of public transportation, the average velocity of transportation which, in some instances, is already declining and so forth.

(9) *Probability range of modification of limiting conditions with time*

In our rapidly changing society the prediction of the limiting conditions—which I mentioned as an example—for future ten or fifteen year increments of time is one of the most essential problems. In view of the uncertainty which besets such predictions, continuous up-dating with reality is necessary in order to be in a position to review, at an early enough time, our goals whenever we observe deviations from our predictions.

Goals of a European policy in the area of technological development

In keeping with the thoughts explained initially I am viewing the goals to be achieved by a policy for technology to be those who require the tool of existing or to be generated technology, i.e. goals which impose demanding tasks upon technology in order to be realized.

Already today there is quite a number of recognizable goals which have become obvious more or less on the basis of the observation of negative symptoms and of difficulties.

(1) *Goals recognizable today*

(a) Improvement of Traffic
Attempt at optimizing road-bound, track-bound and aerial transportation systems.

(b) City Traffic
It is necessary that traffic within the cities must be oriented towards new solutions.

(c) Telecommunications
Priority must go to the urgent improvement of telecommunication systems within Europe and from Europe to the rest of the world.

(d) Effects of Increasing Productivity
The means and goals needed to improve the productivity of manufacturing, a subject which I have not touched upon, lead to increased sharing of work within Europe and pose additional large requirements upon the infrastructure which must be planned well ahead of time.

(e) Substitutions of Natural Raw Materials
In view of the short supply of raw materials in Europe we must set goals which increasingly replace the vanishing natural raw materials with artificially produced materials.

(f) Production of Energy
The search for more efficient production of energy must be increased not only in order to meet the coming shortages but also in order to assure greater independence of the community from political changes.

(g) Improving the Quality of Life
High priority goals are all developments which lead to an improvement of the qualitative conditions of life, the so-called quality of life, which is not necessarily the standard of living. What I am primarily talking about are the new technologies which help to maintain or improve our environment, including new ways of housing also in the direction of mobile housing. Last but not least, this question involves the achievement of an optimum balance between private individual demands of the inhabitants of our Europe and the demands of society for an improved quality of life.

(h) Assurance of Military and Consequently Political Independence
In spite of all plans to improve the structure of Europe we must not forget that the development of modern weapon systems which are designed to assure the economic, political, and military independence of Europe also yields technological progress and that this progress must be included in our considerations.

(i) Export of Technology and Software
Europe should set for itself the goals that its strong technological position should be so expanded that the export of software and technology takes the place of the naturally declining export of hardware products. This involves service to third countries to an increasing degree. In the long term the goal must be to achieve a lead in this area. It is to be expected that the real future level at which competition will make itself felt will be this level of software.

(2) *Method of Planning the Targets*

In an attempt to define targets in the sense of this paper, the following must be considered:

(i) The large number and variety of variables.
(ii) The necessity for careful assessment of the band width of probability during the evolution of those variables in the future.
(iii) Economical, political, and sociological modifications in the various multifaceted regions of Europe.
(iv) The fact that the individual human brain is not capable of grasping the

interrelationship of all these variables and of their own variations and of the resulting inescapable dependence of individual decisions upon the entirety.

The only method available today to deal with these difficulties—particularly in view of the great sensitivity of the European economy and European life to wrong decisions—is the methodology of long-term abstract planning with modern, mostly mathematically based methods of prediction. The methods developed during the two last decades in the area of military and economic prognostication are so refined today that they can be used as reasonably solid basis for the definition of future goals and as decision criteria—provided that they are used carefully and professionally.

Only through these methods will it be possible to take the ever increasing interrelations between the economic areas of Europe into account, interrelations which have existed for a long time but the extent and importance of which was hard to identify. They will get stronger as time goes on

Planning within Europe is rendered more difficult by the very substantial differences in the degree of industrialization and therefore the physical living standards of the population between the various economic areas The goals to be set are strongly influenced not only by world-wide contributing conditions *but also very much by the necessary creation of a European economic community.* In addition, these goals are very much subject to required structural changes and the necessity of a slow but steady increase of the standard of living particularly for those marginal areas which, due to their natural environment, are less suitable for a highly industrialized society.

We must never forget that the European problem of planning for the future and planning for the maintenance and improvement of our quality of life is a much more difficult problem than it has been for the three other large centers *of power mentioned earlier. In view of our poor raw material base,* of the development of our population, and of the financial demands which are placed upon us from many other parts of the world because we are a highly industrialized country, and which take the form of development help or whatever other name you wish to give it, in view of this our planning must be much more detailed and much more carefully executed. We can no longer afford the luxury of the *laisser-faire,* we can no longer believe exclusively in the dynamics of free enterprise and for us in Europe the principle of "trial and error" would very soon lead to collapse because our material resources and the time we have available are not sufficient.

(3) *Teams for Target Planning*

The question now is who should do the planning for these targets and how such planning can be conducted on the basis of presently available experience.

Experience shows that good planning in the sense described above is only possible by large teams concentrated in one place and equipped with all modern tools. These teams must not only consist of members of the large number of institutes who primarily describe and analyze existing conditions. They must primarily be staffed with creative and constructive scientists, engineers, and sociologists. In addition to their special areas of knowledge these men must be trained in modern methods of abstract planning. Furthermore, they must be personally prepared to smoke out the necessities and possibilities of future developments cooperatively and through the use of modelling techniques. Above all they must not become victims of the fascination of today's or conceivable future technical possibilities. Figures and numbers of what they must be interested in, even if the end result of their work is only a statement of probability. Such a statement is always a better decision maker than pure intuition. How ever good a product, if it is asked for at the wrong time—mostly too early—it is a wrong goal. What I am talking about is fundamentally a sober, mathematically supported creative task using abstract methods.

These teams must be staffed internationally from the very beginning and must be selected from the point of view of supranational thinking. Society should try to create several such international centers and to endow them competitively with the same tasks.

(4) *Target Planning at the Level of Decision Making*

For the future it is of primary importance that the decision making level, e.g. the European governments, equip themselves as contracting agencies with a sufficient number of such experts who would be capable, along with the required personal and political engagement, to give these teams the right subjects to work on. Alone or together with the teams they should moreover have the capability to recognize the validity of the input data into the models. In order to achieve this expertise at the government level, Europe should strive for increasing mobility of personnel between industry and government as it is for instance practised in the USA.

Means of a European Policy in the Area of Technological Development

(1) I have pointed out several times that an effective means to achieve technological progress is through building the hardware to fill requirements derived from European goals. Along with this as a means there is also the need for a lot of previously discussed proposals, measures and institutions. In order to be realized, these require such long spans of time that they cannot be considered a prerequisite for European action.

Examples are for instance:

(a) Documentation
Creation of European central agencies for collection and evaluation of existing knowledge and experience at the broadest level, one of the most cost-effective means for the creation and the maintenance of technology.

(b) Patents
Creation of a European patent law and patent office.

(c) Funds for European Projects
For the financing of studies aimed at setting goals and tasks, budgets are to be set up by the community. A technology fund should be established to reduce technical developments to practice at the European level or special European credit institutes or guarantee systems should be created whose task it would be to finance European development projects involving high risk

(d) Standardization
A schedule for standardization of dimensions, quality criteria, materials and many other items should be established as soon as possible.

(e) European Companies
The increasing size and shrinking number of individual future projects as well as the increase in the number of projects conducted within European industrial groupings require international mergers in order to be postured for the future competitive situation of Europe in the world. An enforceable schedule for the creation of the necessary tax and economic legislation should be established even though, from industry to industry and from product to product, the situation and urgency may vary.

(f) Support of Mobility of Personnel
I have already mentioned the necessity for increasing mobility between the working level, i.e. the industry, and the decision level, i.e. the government. But we also need to make the mobility of experts and their families from one country to another more attractive. Declarations of principle will not help, only clear legal agreements. We cannot wait for a lot of bilateral agreements.

(2) *Goals to Achieve*

There is one step that can be taken as soon as the targets are identified and which is not tied to any other prerequisite: it is the establishment of demanding requirements by the European community. Based on predictions and desired goals, a requirement for the realization of the technical means must be found through which the goals can be reached. It is a fact that the state of the art in the world has advanced to the point where, given enough resources, almost any tangible and economically reasonable task can be achieved today without the requirement for large additional inventions. Therefore, the

establishment of requirements for new developments has to be performed with particular caution. Already in the phase of translation of abstract target planning into requirements for technology, already in that phase the cooperation of scientists and engineers is required. Only in this way those requirements which are needed to achieve the target plans can be so defined that progress in technology is achieved in the process of reduction to practice.

(3) *Working method and organization of development*

Already in the definition of the requirements, the entire width of today's technology must be considered. When solving the tasks thus established, this is even more so—for instance in preliminary design, in design itself and in the creation of hardware. The time of stepwise progress by inventions has long since gone away. It has become a steady process which keeps accelerating more and more during the last decades and, as mentioned before, already shows certain saturation symptoms today.

This causes urgent questions regarding the optimum way in which the people solving the problems should work, how they should be organized and, last but not least, how they will be motivated. If we review the teams which, at one time or another during the last decades, have come up with important solutions we notice time and again how fast stagnation of the creative capability of such teams follows after the conclusion of the specific task, except if a new challenge by a new tasks follows on the heels of the last one.

An analysis of this phenomenon suggests the search for organizational and working methods which would exclude such negative consequences. The basic principle of such an organization is a development center which works on the basis of a matrix between technical staff and project-oriented departments. A multiplicity of different but technologically similar tasks is given to this entity and leads to continuous motivation and mutual stimulation of the entire crew. Such a crew which is oriented towards the solution of extremely demanding requirements must never fall below a critical mass of broad technical knowledge and of inspiring assignments and the size of this mass must be continuously surveyed regarding its manageability. The minimum activity in the solution of large tasks, based on experience, involves several thousand people.

(4) *The Role of Competition*

There is no question that man is inherently lazy and that we must, therefore, support the concept of competition. Nevertheless, in looking into the future in the light of many of the statements made above, the question does arise whether the unlimited competition which heretofore has been the decisive factor in our standard of living will still be supportable to the present degree.

The saturation symptoms of highly industrial societies which show up in many

different forms in our present European life and its technical elements, could militate against unlimited competition because existing technology can satisfy almost any sensible requirement and particularly because of the specifically European weakness in raw material and financial resources.

Perhaps this question can be illustrated by looking at the industry in which I am personally working.

It seems obvious that the European economy can afford a transport vehicle like the European Airbus with its high development costs and start-up costs only at a time in each period of time. Also it cannot afford two specialized teams and the continuous maintenance of their capabilities who would both be able to develop airplanes the size of the Airbus, airplanes for which new requirements appear but once every 10 to 15 years. Continuous employment based on such individual tasks—and this is part of the saturation process already mentioned—is simply not possible in view of the great difference between development time (4-5) years) and the life of the system (15-20 years). The road has led us and continues to lead us quite inescapably in the direction of cooperation across the present boarders between the economic regions towards joining of development capabilities and beyond that, in future, towards the possible utilization of specific technical skills of development teams for different related products, properly phased in timing But how should we then be sure that we maintain the necessary degree of competition?

The answer is that wherever cost and development time forbid comparison of prototype performance we must place the competitive activities of such tasks into phases of development in which our European economic resources still permit competition. By this I mean the study and project definition phase which follows after the establishment of requirements. During these phases the essential characteristics for the development of the project are fixed The design solutions and the resulting technological progress falls out from this activity. As a result of the continued development of the industrialized society, competition has more and more shifted into the area of the paper and laboratory and software phases, phases which comprise as a maximum 10 to 15% of the total development effort.

Summary

Many of you may feel that my comments up to this point may have been too abstract. They are based, however, upon working for the last 20 years with a large number of people in successful software and hardware activities. I have attempted, therefore, to show the fundamental logic and interrelation which is involved in the subject of my speech: the goals and ways toward a European policy in the area of technological development. In my view the essence of my comments is the following:

Engineering is a servant. Its tool, technology, can only be developed further by challenges coming from society.

Challenges from society to engineering are requirements which have to be developed so as to satisfy the goals of the European society.

These goals can only be established through the methods of abstract planning because our European community is so complex, because the interactions are so intransparent and because there are such long periods of time and such a high degree of multiplicity involved.

The capability to work with these abstract methods is not widely available within the industry. Also in the governments there are, until now, only few men at work who are familiar with these methods.

Along with the problem of how to maintain motivated teams who are continuously kept at the highest possible technical level, I also arrive at the inescapable proposal that the formation of large European study and development centers in the most important economic regions and for different technical areas should be furthered and perhaps even initiated. This road can only be gone by way of joining industrial interests across national boarders.

It is perhaps an unusual conclusion that software activity will lead to a concentration of mental capabilities—by this I mean appropriately capable people—within Europe. This concentration, however, must take place in centers which must not be self-serving European institutes but living teams who are deeply involved in internal and external competition, who are managed according to economic principles and who are supported by their own manufacturing facilities and experience.

Manufacturing itself is more easily spread. Experience has shown that it is possible to bring the manufacturing task to the people in a well organized way. This is particularly true when we think of the areas around the edge of today's European community.

Based on my many years of experience I believe that these findings concerning European industrial cooperation in development and production can be reduced to practice. This will require a phased approach and a solution to legal problems which still exist. All this is possible if prestige thinking, narrow vision and the urge towards popular appeal are overcome and if broad long-term goals are recognized and requirements are defined which can then be solved by the unified and—given enough time—restructured European engineering community. If we succeed in proceeding along these lines we no longer need to doubt—in view of European creativity—that engineering can be a servant of our European society and that technology can go forward.

OBJECTIVES AND METHODS OF A EUROPEAN POLICY FOR TECHNOLOGICAL DEVELOPMENT —WITH PARTICULAR REFERENCE TO TRADE UNIONS(*)

H. MARKMANN

Objectives

1. *Need for a common EEC policy*

At their summit conference in The Hague in December 1969, the EEC member countries' heads of government and of state expressed the intention, among other important resolutions, to bring about a rapid and substantial expansion in the influence enjoyed by the Six in the field of science and technology. National programmes for research and development were to be compared with each other in order to establish criteria for future coordination and cooperation. The scope for collaboration in specific technological areas was to be examined, and a Community information system set up. Finally, steps were to be taken to encourage the training and exchange of scientists and technical specialists within the member countries.

The Community's previous experience with joint activities in the field of technological and scientific research and development having been less than encouraging, and Euratom—which could well have become the Community's technological centre—having failed to live up to its promise, the Hague declarations and resolutions gave real hope to all who felt responsible for the Community's strength and vigour. Sig. Spinelli, a member of the EEC Commission, aptly remarked that, following the establishment of the customs union and the common agricultural policy during the sixties, the key target for the seventies should be industrial, regional and technological policy, such policies being essential passports on the road to economic and monetary union.

The accession of four new member countries will be giving the Community an added influence, particularly through the technological capability of Britain. This is all the more reason for studying opportunities, institutions and procedures for scientific and technological collaboration, so as to pave the way for political decisions which should, in any case, not be unduly delayed

Europe's position in the world

Though the economic balance between Europe and the United States has by now been completely transformed—and President Nixon's New Economic Policy of August 15, 1971, dramatically underlined America's fear of Europe's

(*) Translated from the German.

strength—the US technological lead over Europe nevertheless remains immense. Behind the US come, as industrial super-powers of great technological capability, Japan and the Soviet Union. Against all these keen or potential rivals Europe must hold its own—not by defiantly retreating within its own walls, but in open and friendly combat.

In the field of advanced—and highly capital-intensive—technologies, markets are no longer being contested by private enterprise firms. With direct government incentives continually multiplying, government prestige is also increasingly at stake. Since economic and technological competition and rivalry between governments or groups of governments may percolate into the political sphere and, in certain circumstances, strain international relations, this poses new dangers.

International cooperation remains least problematical in fundamental research as well as in space and nuclear energy technology (both of which are extremely costly). The closer research and development gets to practical applications, however, the more intractable such cooperation becomes. These hidden dangers and obstacles can and must be overcome by means of a common technological policy, as those responsible for moulding Europe's future should constantly bear in mind.

2. *Growth euphoria deflated*

The idea that prosperity and progress can be measured only by high rates of economic growth has held the whole world in thrall too long. Power and national prestige have been gauged by the same yardstick. Even now, percentage increases and billions of gross national product are objects of international competition on an Olympic scale.

Slowly but surely it is being recognised, however, that both personal and national welfare and morale depend less on quantity of production and consumption than on quality. Modern welfare economics have already provided the theoretical framework for this new approach to economic management. The same trend of thinking and talking is reflected in the pun equating GNP with gross national pollution.

(a) Janus face of technological change

Technology has eased man's life enormously. It has made national economies infinitely more productive, and brought the peoples of the industrial countries to their present level of material well-being. Yet the drawbacks of this "progress" have now become painfully apparent.

Motoring is no longer much fun for any of us. At the sight of our rivers, lakes and beaches, we are increasingly distrustful of advertising bent on making us

"Whiter than White". Simple faith in progress, to which many still cling and which vested interests sturdily or subliminally defend, is in conflict with what still is, or has again become, a highly idealised resistance to technological change. It is not only the younger generation that questions the performance principle by which the western world has been guiding itself and others since Calvin. If earlier it was the dread of the machine—that monster to which men's lives ("compromise spells death") and jobs were sacrificed—that dominated people's lives, it is now the fear that their biological environment will be destroyed by technology. And this fear is more justified than the dread of the consequences of rationalisation. Sober-minded academics meeting in the "Club of Rome" have only recently, with the aid of the computer, demonstrated to us the "Limits of Growth".

(b) Disparity between private and public needs

Nobody today doubts any longer that economic activity so far has been unduly preoccupied with stimulating and satisfying private and personal needs. This was the only attitude which liberalism, the western world's dominant economic and social philosophy for the past 200 years, could be expected to produce. All that goes under the heading of infrastructure has been notoriously neglected. If the least affluent suffer most, public poverty depresses the living standard of us all. In order to bridge the yawning gap of investment in the public sector, all of us will in future have to make heavy sacrifices Trade unionists can only hope and pray that this shift from private to public consumption will not be at the expense of the less well-off.

(c) Economic management gap

Whereas earlier stages of economic development were concerned with the most efficient allocation of the abundantly available raw material resources, which then had to be amplified and converted by way of production and investment into manufactures, the need now is to create a more enlightened and responsible economy. Today's bottleneck is the management gap. The economy cannot be left to its own devices. The invisible hand, credited by Adam Smith and many of his followers with a magic power of enlightened benevolence, ceases to work in the face of the complexity of modern industrial societies. In capitalist systems it is unable, above all, to produce an equitable distribution of income and wealth. Meanwhile, the countries of the west have evolved into mixed economies, where planning is no longer deemed to be a sin against the holy spirit of capitalism.

A policy for technological development can only be conceived and implemented through planning. It is due not least to the absence of consistent planning that the EEC has achieved so little in this field over the past 15-odd years. How this failing might be remedied we shall edeavour to show below.

To avoid any misunderstanding—it is not our purpose to call the economic system into question. Planning, economic management, the market and competition are seen purely as a means to an end.

(d) External effects and social costs of production

New production techniques have increasingly led to external effects, notably by impinging on the natural environment. The result of these external effects is that the cost-benefit calculations of private interests and those of the public interest no longer coincide. Price ceases to be the effective market regulator. This disrupts the allocation of resources, and so may impede growth. Finally, interference with "free" commodities like water, air, quietness and relaxation is detrimental to personal welfare. Already the social costs of these aberrations are almost immeasurable.

Ways and means to (re)internalise such external effects must therefore be found with the minimum of delay. This can be done, of course, only by a system of legal sanctions imposed on the perpetrators of social costs. Purification plants for industrial effluents can hardly be financed out of taxes paid by the workers.

(e) Technology no end in itself

All ideas and measures of technological development should be based on the principle that technology must not be an end in itself or degenerate into a giant toy of "technocrats".

The technostructure so penetratingly described by Galbraith—which, divorced from the normal disciplines both of democratic processes and of industrial ownership, is claimed to be already in control of the social and economic system of western countries—ought to have no future in the kind of Europe that we should like to see. Those who design and operate technology should know that their job is not to rule but to serve. The primacy of Parliament, representing and responsible to the will of the people, must not be questioned. Any attempt to form an alliance between industry and bureaucracy in the interest of "technical progress" and "industrial expansion" will meet with the suspicion and resistance of organised labour.

3. *Quality of life*

It is more than an accident that I.G. Metall, the free world's biggest trade union, has just held a major international conference which took "The quality of life" as its theme. Now that our trade unions through their tireless efforts have won for their members a certain measure of prosperity, this is indeed a question which is becoming of central importance. Increasingly people are looking for the values behind the shiny material façade. Freedom, justice,

security and fellowship—these are surely the basic values underlying our system of social standards. Since every policy has to set agreed standards of conduct if it is not to degenerate into government by executive fiat, we think that it is by such values that a European policy for scientific and technological development should also, and to a special degree, be governed. Only thus can the authorities prevent the people of the ten countries and their organised representatives from becoming suspicious of "Brussels", or already existing resentments from hardening into downright opposition and so perhaps impinging on political decisions taken at home.

(a) Ecological balance seriously threatened

When eminent scientists, whose job requires them to keep their imagination in check and to rely wherever possible on measurable and verifiable facts only, see a growing and, at least in large cities, a serious danger to human life, the time is past for crying wolf. Fortunately, the problems of the environment have penetrated so deeply into the public consciousness, and the basic facts and prospects are so widely known, that there is no need to rehearse them here yet again. It should however, be stressed at once that trade unions expect the Community institutions to take rigorous steps to protect the environment. Where biological survival is at stake, advice and statements of intent are not enough. Pollution is supranational to such a degree that the case for Community action is automatically made out.

(b) Self-determination vis-à-vis technical bureaucracy

In a world of freedom and democracy, man is entitled to resist every external compulsion which is not specifically designed for the protection of the individual and for the viability of the social system of which he forms part. In fact, such compulsion is being exerted increasingly by the technical and bureaucratic machine—a machine which, though essential to the continued existence of our civilisation, should not make man its slave. Man must be able to keep it at a distance. But he must also be given the opportunity to shape it to his needs—not just sporadically at, say, election times or when new technologies are introduced, but on a permanent basis.

Those who earn their bread by work ought no longer to allow themselves to be treated by technical and government agencies as an object. These agencies were invented and instituted by men and for men, and so they should remain. If they have become something else, they should be restored to their original function. Those who work in and for them ought not, like an *élite*, consider themselves a cut above the rest of us.

(c) Participation in all relevant decisions

The principle of participation in decision-making, or codetermination, may be

formulated by demanding that decisions concerning people should never be made without those concerned having an opportunity to share in those decisions. In a democracy this principle is, as far as political decision-making is concerned, a reality. Industry, however, is still largely ruled by autocracy despite the fact that its decisions deeply and ceaselessly affect the daily lives of its workers. If the prime need of the future is to safeguard and improve the quality of life, the worker's participation in decisions concerning particular jobs, corporate strategy and economic management can no longer be denied. Codetermination, as successfully practised by West Germany's trade unions for the past two decades, also expressly involves co-responsibility for the social and economic system. It acquires an added value at time of rapid and decisive technological innovation.

(d) Removal of hierarchies

Historical experience, social research and every-day observation demonstrate that power structures devoid of purpose or lacking in justification sap the will to work, sharpen social tensions, and thus ultimately impede economic growth. Conversely, of course, team work, managerial functions exercised for a limited period, even the election of superiors from a number of equally qualified persons are apt in a high degree to be efficiency-promoting, particularly as far as scientifically and technically sophisticated activities are concerned.

Given the present and, in future, doubtless still greater degree of specialisation in all fields of activity, and especially in that of advanced technology, the days of the (ostensibly) all-knowing and all-powerful "boss" are certainly numbered.

When a common industrial and technological policy comes to be devised, these things should be carefully borne in mind. After all, even the most modern technical equipment yields the desired benefits only if it is combined with the best available human know-how. There is much evidence to suggest that the human role in research and development, in technological innovation and diffusion is becoming progressively more important. Giving the human "factor of production" the attention it deserves is therefore clearly in the interest of those anxious to work for (and naturally also to benefit from) Europe's future development.

4. *Trade unions and technological change*

The workers' movement is an offspring of the factory. Ever since they appeared on the scene a hundred years ago, trade unions have had to come to terms with what is now known as technology. From the machine wrecking of the Luddites in England and the weavers in Silesia to the training of technical specialists in trade union colleges has been a long way. Even so, the attitude of manual and salaried workers towards technology is still pervaded by hidden fear and manifest suspicion.

(a) Job security

The chief aim of every trade union organisation must be to assist in implementing the right to work. Anyone able and willing to work should find a suitable job. In the scale of economic objectives, trade unions give top priority to full employment.

It is therefore understandable if trade unions seek to ensure job security with all the means at their disposal. The political and contractual instruments available for this purpose are, as everybody knows from personal observation, extensive and far-reaching.

Those charged with seeking to promote Europe's technological and economic strength should take this responsibility, imposed on trade unions by their members and by the entire working population, seriously to heart.

(b) Equitable distribution of income and wealth

The worker's movement is a reaction to the wage suzerainty of the employers. By means of collective bargaining and wage settlements between autonomous groups of workers and employers free from government direction and leading-strings, it is hoped that the tendency for the national income to be distributed solely in favour of the owners of capital will be corrected in such a way that the workers do receive their fair share of what they have jointly produced. The old argument about what is a just wage cannot be resolved by economic theory. It has to be settled by political, including if necessary strike, action.

Every investment and every innovation, if properly costed in relation to its benefits, increases the earnings potential and profits of the organisation in question. Government subsidies for research and development invariably improve companies' market positions and earnings. Hence, in issues affecting the distribution and application of the proceeds of modern technology, trade unions will stake their claim No European wages policy yet exists, but it will probably have to come sooner than many still think. Multinational companies and groups will, as their influence continues to grow, be its midwives.

Development of a common technological and industrial policy in the EEC will also give a fresh fillip to the debate about worker participation in company assets. For all their differences of opinion concerning details, trade unions will not stand idly by indefinitely while jointly produced increments in company assets continue to accrue to a tiny class of shareholders only.

(c) Control of economic power

The workers' movement was formed as a counter-weight to the employers' power. Economic and hence political power is, as it always has been, based on

the ownership of the means of production—a fact which one can quite properly assert without being a dogmatic Marxist. Industrial concentration, which derives much of its momentum from technological change and technical innovation, necessarily leads to a concentration of power.

Trade unions, vitally interested in promoting democratic conditions in all spheres of life, and fearful of the checks and balances so essential to the democratic system being eroded, are demanding that economic power be controlled. As they set about strengthening the world influence of the Europe of the Ten through concerted measures in the technological field, the Community authorities would do well to keep this matter of economic power under close scrutiny. In this, trade union encouragement and criticism will not be lacking.

(d) Social innovation

Workers and their unions have long been waiting for genuinely impressive signs of Community progress on the social front. To secure their fullhearted commitment to the Community, free movement of labour and the (all too laborious) evolution of the EEC Social Fund are not enough. Even committed unions would be disappointed if the massive official encouragement now being planned for research and development and for science and technology was to be unaccompanied by systematic social innovation. Indeed, they would like the latter to keep a clear step ahead of technical and scientific innovation at all times.

If European workers have become more aware of the problem, this is due not least to canvassing by the New Left, which has again, to a greater extent than only a few years ago, called the purpose and direction of "progress" in question. Beyond the claim of an increase in the general standard of living, the EEC has so far little to offer in reply to critics of a "Europe fit for capitalists." Within the programme of more or less articulated EEC policies, the part of social policy has still to be orchestrated from scratch. No time should be lost in adequately filling the gap.

5. *General aspects of a European technological policy*

(a) Technological and social development

An EEC Commission document on scientific and technological research and development, dated November 11, 1970, includes the following striking remark: "Pollution of the social atmosphere is no less dangerous than ecological pollution." This exposition of the danger threatening the natural environment needs to be expanded to the effect that all expenditure of mind and money devoted to scientific and technological development is futile if it does not take account of social realities. Every decision and measure taken in the economic

and technical field has social repercussions which are not necessarily beneficial and according to plan. They are made up of countless individual responses of people whose lives are indirectly or directly affected by technological change.

Trade unions should insist that the EEC institutions, when working out a common technological policy, pay more attention to the social aspects than their official pronouncements have so far indicated.

(b) *Trade union participation in planning and decision-making*

The Community institutions have recognised the trade unions as partners, if not yet to the extent that the unions would like to see and that might be helpful to the Community itself. Now that European development is being carried a stage further, and powerful and determined unions are about to enter the enlarged Community, it is essential for the great majority of the population, represented by organised labour, to be able to play its full part in all phases of discussion and decision-making. Opinions and comments expressed by the Economic and Social Committee cut too little ice. Sporadic representations on question of detail and occasional meetings with heads of the Brussels civil service are not enough. Negotiations between experts often lack political backing.

New ways and means must therefore be found to involve the trade unions much more closely in the formulation of European policies than hitherto. Through their European secretariats, and through persons appointed to liaise with the national authorities, the trade unions' readiness to cooperate has also for some time past been demonstrated in institutional terms. Cooperation demands information, however, and here, it must be said, trade unions have cause for complaint. The flow of information is too dependent on blind chance and personal contacts. Nor does it help if it is supplied from national rather than Community sources.

If the trade unions' demand for more information and participation does not fit into the framework of the existing legal provisions, then those provisions should be adapted accordingly.

(c) Community initiatives

Declarations concerning the Common Market's evolution into an economic and monetary union will remain empty words in the absence of effective Community initiatives. The driving force must, as hitherto, be the Commission. The Council of Ministers—mindful of the Hague resolutions of December 1969 and of numerous statements of intent by the national governments—should abandon its all too tentative approach and actively seek to expedite matters. Administrators and politicians should listen more attentively to the views expressed by the consultative bodies, whose frustration and Europe-weariness

might otherwise proliferate, thus causing a potentially invaluable channel of communication between Community and member countries for ideas and practical experience to be lost.

The Community institutions should latch on to any progressive initiatives by member countries and seek to make them binding on the Community as a whole. It is a matter for concern to find the Commission objecting to West Germany, after an extended transitional period, substantially reducing the lead content of its petrol. Could it be that the powerful oil lobby, having failed to influence legislation at the national level, has had something to do with this? In any case, let us hope that the incident is not typical of the attitude of the Brussels authorities. Talk about initiatives for environmental protection might otherwise be hard to take seriously.

Enjoying the backing of European public opinion, the Community's planning agencies can well afford to strike out boldly. For example, they should not allow resistance from industrial interests to deter them from insisting that manufacturers should be considerate of environmental factors. Appeals to technical obstacles should be clearly exposed as pretexts. If the Treaty of Rome is no longer equal to the increasingly pressing problems that face us, the Commission can always invoke Article 235, authorising it to intervene in fields not elsewhere specified. Besides, the European treaties are not divine tablets; they were certainly never intended by their authors to stand in the way of progress. So if, through the pressure of events, the letter of the Treaty no longer matches the reality of the situation, then the legal provisions on which institutions and procedures are based must courageously and constructively be brought up to date. The need for such updating is presented by science and technology daily. Hence the possibility, if not the necessity, of revising the 1957/58 Treaties might appropriately be included among the subjects to be discussed in connection with European initiatives in the technological field.

(d) Coordination and harmonization

For each of the six, and soon ten, member countries of the Common Market to go it alone in developing and encouraging advanced technologies seem impracticable on the grounds of costing and financing alone. Yet the fact remains that expensive projects are being pursued in a number of countries concurrently. National ambitions and rivalries are evidently not easy to eradicate. Sensible Community action nevertheless requires a maximum of coordination and joint effort. The European taxpayer, regardless of where in the Community he may live and work, has the right to demand that money collected from him by the government should be spent as economically and usefully as possible. Thus, if simple calculation shows Community investment in encouraging science and technology to be appreciably cheaper than national egocentricity, the case against Community projects clearly falls to the ground.

The establishment of uncomplicated but effective procedures for member countries to consult each other on all major current or planned projects of technological research and development, as well as on their practical application, is therefore now a primary prerequisite. Both the Commission and the Counsil of Ministers should be given access to all relevant information emanating from the member countries.

In the light of such information, the necessary next step is to set about deciding whether this or that project should be undertaken by the Community itself or jointly by a number of national entities. In this as much neutral know-how should be involved as possible. The word of independent experts ought to carry more weight than the voices of national interests, whether officials or industrialists.

(e) Equitable distribution

Official statements about government encouragement of research and development hardly ever concern themselves with the effects of its distribution. Evidently it is felt that government aid for projects calculated to raise economic efficiency will directly or indirectly redound to the general good. This is a view to which trade unions cannot subscribe. Since the means for strengthening the earnings potential and market position of companies or entire industries are provided willy-nilly by the general public, it is not unreasonable to ask that the general public should also enjoy the fruits thereof. The aided firms could and should in turn be made by the exchequer to honour certain commitments—which could range from price restraint to profit-sharing—designed to prevent a comparatively small class of shareholders from additionally enriching themselves out of their companies' official subsidies.

(f) Disclosure

As essential element of a European policy for promoting technological development is that all plans and projects should be disclosed. The public has a right to know for which purpose and to what extent public funds are provided. Arguments stressing the need for confidentiality should not be taken too seriously. In any case, a wide circle of representatives of the public interest should be kept continuously informed about, all details of the technological policy as it develops. Suitable candidates for this are the European Parliament and the Economic and Social Committee, which could also decide on projects to be treated as secret or confidential. Anyhow, decisions concerning the degree of disclosure should not be left to governments, let alone the aided companies or other institutions.

(g) Competition and concentration

The industrial policy which the Community is hoping to launch, and which is now to be supplemented by a technological policy, is stated to aim at the

creation of efficient industrial units capable of holding their own in world markets. Now efficiency is not necessarily synonymous with size in the quantitative or numerical sense; examples of strongly placed small and medium sized forms abound. Very often, however, market strength can only be attained and held through structural concentration, and this is where the problems start. What is harmless or even necessary in the supranational and world market context may, and sometimes must, turn out to be anything from market domination to downright monopoly on the home market. Even though the old textbook belief in perfect competition and its alleged blessings has nowadays given way to a more realistic preference for "workable" competition, champions of a free social and economic order are nevertheless bound to ask themselves how far concentration and economic power should be allowed to extend.

The treaty setting up the EEC is based on thoroughly liberal economic ideals. It therefore contains clear-cut provisions regarding competition and market domination, though their practical influence on the Common Market's steadily accelerating merger and concentration activity has been negligible. The competent Community authorities are now faced with the difficult task of keeping a careful eye on the process of concentration and of actively intervening wherever acceptable or desirable concentration develops into unwanted or dangerous market domination. Precisely where the line should be drawn, and how active intervention should proceed, is something about which in West Germany, in connection with the proposed amendment of the Fair Trade Restriction Act, men of learning, government officials and vested interests have been arguing, without reaching a political decision, all too long. It is much to be hoped that decision on a Community solution will be quicker in the making and result in clear-cut standards that can be enforced.

Failing this, and if the trend towards concentration and restrictive practices is allowed to continue unchecked or even officially encouraged, the basic question of whether the free market economy has made an utter fool of itself, and whether it should be replaced by a system of democratically accountable state planning and direction, will arise in all seriousness.

Unchecked cross-frontier mergers and proliferating multinational companies and groups are also questionable from an economic and monetary point of view. Such structures can easily escape national measures of political regulation at present, and would be hardly, if at all, amenable to future intervention by the Community. This ia a matter which the Community should not overlook when laying down articles of association for the new type of European company.

6. *Focal points of the technological policy*

(a) Traditional activities

In the fields of nuclear research and nuclear energy, transport and communications, data processing, automation and numerical control, metereology, oceanography, metallurgy and materials research the Community, aided by special institutions like the Joint Research Agency and especially Euratom, has already done sensible and, in the circumstances, reasonably useful work. Their future importance alone should encourage the Community to persist in these efforts. The need for early reform in the institutional framework of Community research will be demonstrated later.

(b) New activities

From a trade union point of view one can draw up a whole catalogue of activities which the Community should take up if its technological policy is to make a versatile, integrated and efficient whole. The Commission has, of course, already indicated the additional areas on which it plans to concentrate shortly.

First and foremost, there is the problem of pollution. On this the Commission's ideas announced so far have our full backing. The same applies to the important statements made by its President, Mr Mansholt, concerning the future development of human life. Trade unions are most concerned that action in this literally vital area should be prompt and vigorous!

Education and industrial training is another important field which the Community should actively help to encourage. Together with the member countries' national authorities, it could set up model institutions free to conduct experiments which, if promising could be extended generally.

Health and public hygiene are natural objects for Community-sponsored research and activity. Man's personal and working life is under such heavy stress, and diagnosis and therapy are still so little geared to the new health hazards, that the leeway which doubtless exists can only be made up by cooperation between all the institutions concerned. Industrial and social medicine have for trade unions a special importance.

Much of the Community's attention in implementing its technological policy ought to be devoted to labour market problems. Technical change will in future require of workers an even greater degree of occupational and geographical mobility than in the past. Preparing workers to participate in this change without incurring material hardships and without loss of social status will demand a great deal of research and practical effort. Nor should the challenging task of forecasting structural changes be overlooked in this connection.

A special aspect of labour market policy is encouragement of exchanges of scientific and technical personnel. The constructive work already being done by the Community in this field should be unstintingly expanded.

The Community should go out of its way to devise and test advanced new types of work organisation. There are signs that the young workers of today are no longer quite so content as their fathers to work on an assembly line. Equally, experience shows such experiments in worker self-government as job enlargement and job rotation to be capable of producing surprisingly good results.

Here mention may also be made of the need to adapt technical equipment more closely to physiological factors. By taking a more active interest in this, the Community could also do something to repair its own, as well as most of its member countries', past errors of omission in regard to the social sciences.

Housing, town and country planning are fields to which not only environmental considerations but also research and development incentives will accord a special importance in the future. Technical change intensifies urban sprawl. A common technological policy must therefore include measures to deal with this problem.

Workers these days have a legitimate interest in greater social security, protecting them from the major hazards of life like sickness, disability, old age, unemployment and death. The Community, having done little or nothing on this front to date, must now seize the change of making up for lost time. When some countries with very advanced systems of social security shortly join the Community, they will not be impressed to find something like a vacuum within the Europe of the Six.

In response to the continuing trend towards more participation, co-partnership and co-determination of workers and their unions in economic and social affairs, the Community should develop its own models for codetermination and throw them open to discussion. Such discussion—which could be heated—will show whether our social and economic system is capable of reform and self-regeneration, or whether it is prepared to suffer social tensions which could make its planned place in the world well-nigh unattainable.

Finally, the Community should try and work out a system of social statistics. OECD, basing itself on pioneering work by Britain and the United States, is now seeking to supplement the already existing economic by a "social" system of national accounts.

European workers and their unions would have their commitment to a unified Europe greatly strengthened if the European institutions fitted the programme of action briefly outlined above into their own policy for technological develop-

ment. In doing so, they would help to dispel the still valid suspicion that industrial and technological policy is intended to be nothing but a more imposing version of earlier appeals to self-enrichment. Technological excellence and satisfying social conditions should not exclude each other. On the contrary, they could and should be complementary.

Methods

1. *European Research and Development Council (ERDC)*

Bearing in mind the fragmentation of responsibility between different institutions, the failure of the Joint Research Agency, the complete ineffectiveness of the "Scientific and Technological Research Policy" Committee, and the notorious difficulties over Euratom, there is much to be said for the Commission's proposal to combine all relevant activities of the various Community institutions—except Euratom—in a "European Research and Development Council." It is welcome that, besides officials and experts, this body is also to include representatives of the two sides of industry.

All now depends on providing ERDC with comprehensive terms of reference to monitor and plan research project within the Community area. Trade unions would like even now to express their readiness to cooperate in the proposed council loyally and constructively. They basically agree with the ideas formulated in the Commission's draft of November 11, 1970. Above all, they trust that ERDC will not be set up as a purely bureaucratic institution which, like many others of its kind, would be closed and clumsy.

There is no objection in principle against the idea of simplifying the administration of research and development incentives by means of a "European Research and Development Agency." Whether the measures taken by such an agency would be sufficiently open to public scrutiny would depend on its constitution.

2. *Euratom*

In theory, Euratom is the institution in which all scientific and technical activities—first in the nuclear field, but subsequently also in all other areas of advanced technology—could best have been centralised. Unfortunately, this has been thwarted by national rivalries and frequently overlapping military and industrial interests. The indecision of the Council of Ministers, the feeble authority of the Commission, and bureaucratic red tape in general have sealed this European institution's sorry fate.

There remains the hope that the Community's precarious energy supply position may give Euratom a new lease of life. One fruitful field of activity could

be the construction of nuclear reactors. Another might be coordination of research.

3. *Environment Research Institute*

This brain-child of the Commission should soon be a reality. The institute ought to be largely autonomous, with a budget and staff sufficient to enable it, as European research centre for a field of critical importance, to become the hub around which all associated activities revolve. On an advisory board or governing body social interests as well as scientific experts ought to be adequately represented.

4. *Central Office of Information and Documentation*

The Central Office of Information and Documentation already harbours an enormous computer-fed wealth of documents from the nuclear field, together with an efficient retrieval system, on which outside specialists are drawing increasingly. It could well be expanded into a comprehensive system of scientific and technical documentation with appropriate data bank. Through exchange of information it could also give a powerful impetus to integration. Community money allocated to its diversification would be well spent.

5. *Consultative bodies*

Besides forming new, or reviving and strengthening existing, official Community institutions, the way should be left open for supporting the EEC authorities with ad hoc consultative bodies, where European expertise in promoting research and technology could be mobilised as required. Such bodies, assigned to ERDC and other institutions, should have no political power, but act in a consultative capacity on scientific matters. They should naturally have set terms of reference, but procedure should be left to their own discretion.

6. *Independent research institutes*

All Community departments concerned with technological problems should seek and maintain close contact with universities and non-academic research institutes, such as the French *Conseil National de la Recherche Scientifique* and the German *Max-Planck-Gesellschaft*. These have a formidable concentration of knowledge and talent in the most diverse subjects from which the common technological policy can benefit.

At the same time, in many European countries the relationship between government, university and industry is no longer as easy as it used to be. Students and research workers are asking pointed questions about what and whom research is for. They are demanding, rightly, that research should acknowledge

social obligations. The Community, by allowing its research and development policies to be guided by due concern for their social implications, could do much to relieve tensions and disputes.

7. *Industrial companies*

Companies, and industrial companies in particular, are subject to technical change regardless of whether they adopt, and in their production (and administration) apply, the research and development innovations of others or engage in research and development on their own account It goes without saying therefore that the Community's technological policy must be based to a large extent on (industrial) companies.

As has already been repeatedly pointed out, however, neither the trade unions nor presumably the general public would stand idly by if, as a result of the common industrial and technological policy, the balance of bargaining, distribution and power—which in all market-oriented systems, and hence also in the Common Market, is anyhow disturbed and distorted—was to be shifted still further in favour of companies and against workers, consumers and government.

So far, statements by the Commission concerning the allocation of development contracts to industry have done nothing to allay the trade union's misgivings. If, as seems reasonable, grants are related to earnings, it is imperative for companies unreservedly to open their books. Ideally, audits of company accounts should be conducted by independent bodies fully familiar with the "cosmetic" arts of industrial book-keeping. The extent of the charges to be borne by companies themselves would have to be clearly defined by the contract-awarding agency in terms of impeccable yardsticks.

Eligibility for grants should be scrutinised rigorously, including both the need, if any, for channeling investment into one sector of industry rather than another and the requirements of labour market policy. Independent bodies should also carefully check whether demand for the grant-aided companies' products will continue to be adequate. Might sanctions be applied against companies shown to have allowed grant-aided projects to founder through their own fault? In the absence of any guarantee that Community-assisted companies would trade fairly and with proper regard for the general interest, there is also a case for looking at the question of patent protection.

If the Community's limited funds are to be apportioned selectively and used in accordance with its long-range plans, it is essential that the initiative in giving research and development assistance should be left primarily to the Community's own agencies. Allocations of Community funds should, in the public interest, be properly disclosed. The final decision in all things must rest with the European Parliament.

Summary and prospects

The enlargement of the European Communities and the Hague resolutions provide a unique opportunity, historically speaking, for advancing the ten member countries' social and economic conditions in one burst. Failure to seize this opportunity would be deeply disappointing. Europe's future—from an economic point of view—depends on high-technology, highly sophisticated production. It is a legitimate aspiration of community leaders to seek, through well-directed public assistance, to secure for Europe a leading position in the world-wide competitive struggle of scientific and technological research and development and of its commercial use and exploitation.

This aspiration must, however, be pursued on a basis of democratic freedom unless man, the pillar of the social and economic system, is to be squashed by its technical and administrative superstructure. The tools for preserving a society which makes life worth-while are self-determination and co-determination.

The observe of the technological coin was demonstrated to us with brutal force at the end of the period of reconstruction after the ravages of the last war. The need for developing—and financing—technologies to prevent or remove the harm to the biological equilibrium of this earth done by modern technology is, of course, created by pollution. The Community's willingness and ability to cope with these ecological problems will largely establish its right of existence.

Making European institutions and procedures more democratic must go side by side with spreading the fruits of government aids to industry through society. The European cause would be ill served if the only effect of the proposed technological policy was to reinforce the bargaining strength and economic power of industrial companies. The public has a right to be fully informed about how public funds are used; this applies equally to funds provided for research and development.

To translate the few points outlined in this paper (and capable of elaboration in detail) into concrete terms and into political and administrative practice will require rare courage and imagination. The Community's founding-fathers displayed these qualities in full measure, as even those to whom their philosophy—or ideology—was distasteful are bound to admit. The next generation of architects of a bigger Europe face a harder challenge—not only to forestall the threat to biological life, but also to do justice to the sharpened critical awareness of the man in the street.

The growth euphoria of the fifties and sixties is clearly fading. It is being recognised that personal and national welfare depends not so much on gross national product per head as on the social product's quality. Industrial and

technological policy is also social policy, i.e. social innovations are just as important as scientific and technological ones, if not more so.

Europe's democratic trade unions will follow the Community's future policy on technology with sceptical sympathy. They offer the hand of cooperation, but wish to be taken seriously as representatives of the Community's workers They certainly do not wish to be a stalking-horse for others.

AIMS AND MEANS OF A EUROPEAN POLICY FOR TECHNOLOGICAL DEVELOPMENT (*)

R. CLARKE

Personal introduction

1. It is a great honour to be invited to contribute to the Venice Conference on "Industry and Society in the European Community", particularly because this is the first occasion on which British people are participating in functions organised by the Commission as full members of the Community family.

2. I am speaking as an independent person. I retired in March 1971 from the service of the British Government; and I am now working as a non-executive director of several industrial and financial companies all of which hope to exploit fully the opportunities for expansion and development presented by the extension of the Community to include the United Kingdom and the other new members.

3. My experience in the field of this Conference is as follows. In the first twelve post-war years, I was heavily engaged in the collective European enterprises to bring about European economic recovery and later to create a European free trade area as an extension of the original Community. I was chairman of the committee of officials in London which had the task of instructing our delegations in Paris, first in the sweltering hot summer of 1947 in the Franks Committee which formulated the European response to General Marshall's historic offer (which it was my privilege to put into language in the report of the Committee of European Economic Cooperation); then in the creation of OEEC and then in the division of aid and other operations of the Organisation.

4. Ten years later, I was again chairman at the London end of the negotiations in OEEC for a free trade area linking the Community of the Six, which was then being negotiated with the other members of OEEC—a sadly missed opportunity, I have always thought, both by the British and by the Six, which if taken could have advanced European unity by at least 12 years. So I start as one who has had the exhilarating experience of work in European cooperation for great objectives, both when it has gone right and when it went wrong.

5. On the technological side of the subject of this report, I had merely five years as Permanent Secretary—the top civil servant—first of the Ministry of Aviation and then of the Ministry of Technology, in which we were engaged in working out a policy for technological development for the United

(*) Original text.

Kingdom; and much of this experience seems to me relevant to the problem of this report.

Technology as a Tool

6. Subject No. 8 of the Conference is important; for the extended Community must surely state its position about technology and technological development very definitely. We are now in a period in which technology is under attack. Technology is sometimes presented nowadays, indeed, as an ogre which is destroying the quality of life—polluting the air and the rivers and the seas, making our lives unbearable with petrol fumes and traffic jams and aircraft noise, adulterating our food and undermining our health. If one is to judge by the opinions of some of the scientists who speak on these matters, the only question left open is whether technology will boil us to death or freeze us to death. There is nothing unusual in these attacks. All of us can remember when technology has been the ogre which creates war The older of us can remember when technology was the orge which created unemployment. There have been periods also in which technology was presented as an angel, creating a miraculous cornucopeia of goods and services, the driving power for economic growth and the increase in human welfare and the standard of living, and the only hope for both checking the growth of the world's population and freeing the people from poverty and early death

7. Technology is in fact all these things and none of them It is neither "good" nor "evil", neither "ogre" nor "angel". If instead of using an abstract word like "technology" one used practical words like "engineering" and "chemistry", the truth would emerge more easily. "Technology" is in fact a tool, which has no moral or social mystical attributes of any kind

8. When we talk about a "European Policy for Technological Development", therefore, what we have to decide is whether European Governments should have a common policy for the use and application (or for the improvement or suppression) of the tools of technology (i.e. engineering, chemistry, etc.). One cannot start by stating European aims for technology: one must start by saying what we want in Europe, and then go on to consider how the tools of technology can be applied to bring about our aims.

Aims of the Extended Community

9. We would all concur in two Community objectives:

(a) economic growth—to increase the standard of living of everyone in the Community, taking this in the broadest sense of supply of goods and services, privately and publicly provided to individuals or to the society as a whole and taking into account overseas investment and our responsibilities to poor countries;

(b) the social objective of quality of life—the distribution of goods and services for the welfare of the whole community and the balance of freedoms and constraints to restrain some people's use of freedoms from damaging others'.

10. For (a), despite all the talk of an "affluent society", it is obvious that a great expansion of the output of goods and services in the next ten years is indispensable to satisfy the needs of our population. The increase in productivity (output per worker) will be more difficult to get than in the last decade, with less scope for switch from low-productivity agriculture to high-productivity manufacture, and more movement to constant-productivity educational, medical, professional services. So the tools of technology will be as important as they have ever been: and this must come high on the European agenda.

11. For (b), we must certainly hope that Europe will devote more resources to the problems of pollution. The tools of technology are as important for this as they are for economic growth. The existing pollution cannot be remedied (cannot even be measured and diagnosed) without major application of the tools of technology. The prevention of future pollution is in essence the enactment and enforcement of laws (like the Clean Air laws in Britain if I may give an example) which are practicable in terms of technology, i.e. which do not present offenders with impossible problems; coupled with the improvement of the tools of technology to permit a steady increase in the standard prescribed by law.

11a. Another example from our experience in Britain is in aircraft and engine noise. For several years past, research to reduce noise has continued at well over £ 1 000 000 a year for work at Government research establishments (mainly the National Gas Turbine Establishment) and by manufacturers. Besides this direct research into noise, the British Government have financially supported the RB211 engine, one of whose major characteristics is an exceptionally low noise level. One concept is to try, always inffectively, to abolish aircraft because of their noise: the other is to enlist the tools of technology to make aircraft more silent.

12. The answer to the pollution problem must lie in the combination of enforceable laws with the application of the tools of technology to make it possible for people to carry out the laws and for the standards to be steadily improved. To think of improving the quality of life by measures which are hostile to industry and which seek to suppress technological advance will be self-destructive, and will lead both to bad economic performance (i.e. failure to achieve the rate of improvement of standard of living and welfare upon which the public insists) and to bad quality of life.

13. Yet another aspect of "quality of life", specially relevant to Europe, the cradle of the industrial revolution, is the economic and social reconstruction

of the oldest industrial areas founded on the great industries of the early 19th century, an immense task of physical redevelopment of entire areas; a task in the oldest-established industrial and urban areas of Europe not unlike that of creating a new economic and social life in the poverty-stricken undeveloped rural areas of Europe.

14. In all these problems of "quality of life" the application of the tools of technology is overwhelmingly important. This too must come high on the European agenda.

Europe and the World

15. A third objective of the extended Community, as I would see it, is to enable Europe to play its historic part in the world Indeed, this is one of the concomitants of (a) and (b), for without economic growth and without a quality of life appropriate to our advanced group of countries, Europe can hardly expect to have her voice heard.

16. There is a fundamental point here for technology policy The world may be entering a new phase, in which there are no longer two super-Powers, USA and USSR, contending or combining to exercise world power, but in which there may be as many as five or six such Powers, with USA and USSR much less overwhelmingly preponderant than they were in the 1950's and 1960's, and perhaps less willing to take responsibility for the solution of the world's problems. In such a world, Europe's role should be profoundly important; and Europe's policies should surely in these circumstances be dominated by the needs and responsibilities of our world situation. For Europe to be self-centred and to concentrate its energies on its own internal institutions and parochial problems, and to approach the rest of the world from a nationalistic and indeed chauvinistic viewpoint would truly be the abdication of Europe, and in the end its *disappearance*.

17. This chauvinism has expressed itself with some force in recent years as an anti-Americanism (from time to time in Britain and in the Six alike) which has been related particularly to a *kind of technological chauvinism. The purpose* of "a European technological policy" has sometimes been stated as a "need" to build up advanced technology in Europe to counter the "imperialism" of US technology and to preserve Europe's "technological independence".

18. One may perhaps hope that the events of 1971 have put such concepts in their true perspective. It ill suits Europeans to attack American technology which for 25 years has been the only effective defence of Europe, and continues to be so. It is certainly spectacularly clear that the US performance in *advanced technology has brought* with it no great commercial or competitive advantage: it has not even enabled the United States to resist a 20-year

deterioration in its balance of payments. Of course in some products the United States has gained a commercial ascendancy, often with the powerful reinforcement of European subsidiaries and associates and research establishments, which are now an indispensable part of the European economy. But in other advanced technology products Japan has gained an equal ascendancy; and in others again European producers are in a no less powerful position.

19. To develop a self-centred "European technology policy" aimed at making Europe "independent" of American or Japanese technology would therefore in my opinion not only be a wrong policy from the commercial and economic point of view (and therefore doomed to failure from the start) but would also be wrong from the wider political standpoint of Europe's future role in the world and worldwide political and economic interests. The question of "technology policy" raises very clearly these long-term issues of Europe's future.

The European Market

20. The strengthening of technology (i.e. of the engineering and chemical industries) in the extended Community will follow primarily from the keener competition and possibilities of consolidation which result from the removal of trade barriers and the adoption of more uniform rules governing competition. These are the same issues as those of industrial policy generally which are discussed elsewhere. There are however some regulatory areas of particular importance for the advanced technology interests, e.g. company law, patents, protection of trademarks, removal of technical barriers to trade. The last-named is specially relevant. The development of standards and quality assurance procedures becomes increasingly necessary, for without some form of certification how can the buyer of a highly complex advanced product know that he is getting a reliable product and so make a reasonable choice? But these provisions, enacted by law to protect consumers, can easily become new protectionist devices, both within the extended Community and between the Community and other industrial countries.

21. New concepts of public interest (e.g. safety in motor cars, reliability of pharmaceuticals, accuracy of instruments, purity of food and drugs, avoidance of effluents, protection of customers) call for more regulations, and the introduction of new advanced products calls for quality assurance procedures. These right developments open up possibilities of piecemeal national action which can easily frustrate the effects of the removal of tariffs within the Community; and unless negotiated keenly in particular with the United States and Japan could result in another series of obstacles to world trade. The Commission must surely have a large role here, both within the Community and internationally.

Public Procurement

22. The pressures of the free market, upon which the Community must rely for the spreading and strengthening of technology, are unlikely to apply very effectively to some sectors of industry and trade, important in advanced technology, where the customers are Governments, other public authorities, or privately-owned public utilities. Defence equipment electricity generation and distribution plant, telecommunications equipment, locomotives and railway rolling stock, civil aircraft and aerodrome equipment, waterways and ports equipment, broadcasting equipment etc. come into this category. In all industrial countries, there is a strong tradition that Governments and near-Government authorities buy from their national industry. This is so when the utility is managed by a Government Department (as is normally the case, though not in Britain, in posts and telecommunications); or by a nationalised industry (railways and electricity in Britain and France), or by private industry (electricity in Germany).

23. Experience in GATT has shown that the State trading rules can only rarely be brought into play; and where the utility is privately owned, there are no international rules except those that constrain Governments from requiring the utility to discriminate against imports. Utilities in the United States have in the last ten years bought significant amounts of equipment from Europe. In EFTA, British utilities have made a number of purchases of Swedish equipment. In the original EEC, there have so far been very few purchases either by the publicly-owned French utilities or by the privately-owned German utilities from other Community countries There are deep national traditions here, which are not readily responsive to international regulation No manufacturers of these equipments will ever believe that the State or near-State purchaser is carrying out the regulation fairly unless some purchases are in fact made from abroad.

24. This weight of tradition will not be moved at all easily. On the national plane, the State- and near-State agencies have difficulty in framing their procurement policies in a manner that deals soundly and in practical terms with their manufacturing industries, bearing in mind the need to support the latters' export capability; and to introduce a further dimension of import competition (except in very special circumstances) would be a further source of great difficulty. Taking all these considerations together, therefore, it seems to me clear that the nature of the national situations is unlikely to be changed by international regulation.

25. If the extended Community is to make progress in this field, it is most likely in my opinion to come from an "industrial" rather than a "trade regulation" approach. A more active consultation between the various public utilities within the extended Community—e.g. electricity supply, railways, telecommunications, airlines, airports—to bring about more standardization of

which has resulted from the great US defence and space programme of the 1950's and 1960's is sometimes though to represent a more comprehensive technological lead than is in fact the case both vis-a-vis Europe and Japan. Aerospace is certainly of great importance for technology as a whole, but it is not of the overwhelming significance that is sometimes claimed for it; and many Americans now think that the concentration of American resources on aerospace has on balance weakened rather than strengthened the advanced technology and competitive power of United States industry as a whole. This point is of great significance for the extended Community. The allocation of very large resources to one technological area can create great strength in that area, but that allocation can be made only at the expense of other areas, and if the objective is economic (and not political, military or prestige) there is more to be gained from an advance across the whole front than from concentration upon one area, especially one which is so dependent upon Government and upon non-economic considerations.

30. There is no reasonable doubt, however, that for a variety of reasons—defence, civil aviation, technological competitiveness etc —a strong European aerospace industry (both in aircraft and in advanced electronics) is necessary. None of us in the extended Community could be content with a situation in which Europe was wholly dependent upon the United States, the Soviet Union and Japan for our aviation equipment, whether for defence or for civil aviation But there are many different ways of achieving this They all presuppose a substantial European air defence effort, for without a large defence demand there cannot be an effective aircraft industry; and indeed without a large defence requirement it is difficult to argue that there is a powerful case on grounds of European policy for requiring an indigenous aircraft industry any more than any other industry. European defence and industrial considerations come very close together here, for unless there are common requirements for the Air Forces of the European countries and a common procurement policy, it will never be economically justifiable to do the research and development and production in Europe, for the scale of each country's individual requirements is unlikely to be large enough. Thus, the purpose of having an effective European aircraft industry cannot be achieved without a great deal more unity between the Air Forces and the procurement of their supplies than exists today. On the other hand, if it is possible to bring the requirements and procurement of the Air Forces together this becomes a first-class economic foundation for the European aircraft industry, provided of course that the industry is not so fragmented that it cannot take advantage of this.

31. For civil aircraft, the problem is more difficult. For the aircraft which will carry the bulk of the world's traffic in the next two or three decades, the sales required to justify the research and development cost are much greater than the total demand of the European airlines even if these requirements could be unified and if their procurement policies could be dictated by the

Governments. The European airlines are moreover working in conditions keen competition with the United States and other airlines, and the needs of civil aviation industry cannot be subordinated to those of the aircraft dustry. It follows therefore that the European development and production civil aircraft makes practical sense only if these aircraft can be sold in su stantial numbers in the rest of the world, and notably in the United Stat which is by far the largest market and is likely to remain so for as far ahe as we can see. A "self-sufficiency" policy for the European civil aircr industry would require the enforcement of a common European-only procu ment policy on the airlines; and it is very likely that even if this w achieved it would require subsidies to the manufacturers (because of inadequa markets) and subsidies to the airlines (because of higher operating cos The stronger the military aircraft industry, and the less the industry in Euro is fragmented, the more likelihood would there be that this industry could successful in producing large civil aircraft competitively. But the difficult of even the extremely powerful American industry shows the size of t problem.

32. The solution may perhaps ultimately be found in the growth of a ve small number of international European aerospace industrial undertakin independent of European Governments (though closely linked with them, ju as the great US aerospace companies are linked with their Governmen each with its alliances with US and possibly Japanese and other firms. T European defence requirements would be handled by a common procureme policy, which would procure these requirements normally from the Europe aerospace undertakings. These undertakings would develop civil aircraft supply the world market rather than to be aimed at a European airline whi would be too narrow to provide an economic basis for development and pr duction, but the European airlines would consult together to determine the requirements and to appraise competing systems, and it would be general understood that they would "buy European" if the European undertakin were offering competitively efficient equipments. It may be possible to find satisfactory basis for Europe on these lines, but there is not very much tin in which to do it; and this is probably the most difficult of all the problems advanced technological industries which are facing the extended Community.

Computers

33. The computer industry is the other advanced technological industry i which the United States is predominant, and in which there has been wide spread opinion that an indigenous European industry is essential. This is muc more important than the aerospace industry in its impact upon industry an upon society. But it is the use of computers, whatever their origin, that ha this impact; and there is a considerable distinction between the design an production of the computer hardware and the planning of their application an

operation. The demand is of course mainly civil, but Governments are important through the defence and space uses but also in the widespread uses for normal governmental work. However, unlike the aerospace industry which is intrinsically a Government-supported industry, notably because of the predominance of defence demand, the computer industry is a "normal" one which should be profitable.

34. The main characteristic of the computer industry in Europe is that it consists very largely of subsidiaries of IBM and other US companies producing under licence from US companies The British company, International Computers Ltd., has been the only indigenous European company producing its own equipment. The problem of building up new European undertakings against the great technological and commercial strength of IBM is a formidable one; and although in recent years much attention has been given to this, and European Governments have devoted large subsidies to research and development, we are still a long way away from real European strength. There are powerful electronics firms in Europe, and the lack of progress in computers is striking.

35. Those who have favoured energetic steps and Government subsidies to create an indigenous computer industry in Europe have in my opinion made a mistake in thinking of the major problem as one of "advanced technology", and thus in focussing upon the creation of a giant computer. The demands of scientific research establishments for great computing power are important, but the true industrial problem is not that of producing a few super-computers but that of producing large numbers of computers for business uses of all kinds, and the software that goes with them, and the servicing facilities, and the financing of their hire or purchase. It is much more important for there to be undertakings in Europe which can compete effectively with IBM and its European subsidiaries in the market as it is, than to be moving into the technically exciting areas where there is not yet a commercial demand. There is no doubt that in this commercial field, the economies of scale are very great; and the question does arise of whether it is realistic to expect comparatively small purely European undertakings to be able to compete effectively with IBM over more than a narrow range of products.

36 One must ask the question whether this, like civil aircraft, is not really a single world market, in which the true competition will not be between US companies and European companies and Japanese companies (which have been more successful than anybody else in establishing themselves) but between large groups or consortia operating wordlwide, either (like IBM) with large European undertakings as part of an essentially US enterprise, or as consortia with US, European and Japanese members. Certainly if a structure of world groups, developed on these lines, the technology would be available in Europe (and indeed created there, as it is now in the IBM research establishments in Europe); and the business organisations would be of dimensions which would

make possible genuine competition, instead of defensive action on an insufficient scale. In my opinion, the allocation of very large Government funds to research and development is unlikely to have the effect of building up a powerful indigenous European computer industry unless the R & D effort is concentrated on the development of techniques to assist the economic manufacture of volume production types of computers rather than the development of higher and higher capacity computers for which the needs will always be small and specialised. There may be more advantage in discussion between the purchasing agencies of the European Governments, on the lines which I have suggested above for public procurement generally. It is unlikely in my opinion that IBM will be able to maintain its present world-wide ascendancy. But the capability of European firms to play their part in an effective world-wide competition will depend much more upon commercial than upon technological factors.

Research and Development

37. Governments have a decisive part to play in the financing of research. What should be our objective here in Europe? In basic scientific research, carried out in universities, research councils, and institutes, the true role of government is limited to providing money. In these kinds of research for the furtherance of knowledge, with no clear impact upon industry or public welfare generally for, say, 20 years ahead, there is no reason why government should concern itself with the direction or content of research. It is simplest for the Government to decide arbitrarily how much money to provide for this purpose—essentially to provide the seedcorn for the technological advance of future generations, and to ensure that an appropriate proportion of brilliant young men and women are attracted into science—and to appoint scientific advisors to distribute it. This work is all published and truly international in character. There is no reason to suppose that Europe devotes too little resources to it; and the most significant role for an international body is in the provision of projects like CERN which are too large to be done by one country although there may be scope for international action to rationalise research programmes and avoid duplication.

38. The role of government becomes more selective at the next stage, when the research is either directed to specific industrial and social requirements or is of a nature which is likely to have a specific impact in a reasonably short period of time. For all national Governments, there are clear questions for decision of whether they should finance research of various kinds. Governments of countries with substantial resources to defence research and development, and will devote some resources to medical research. The rest depends very much upon the Government's policies in general. In the United Kingdom, very large resources are devoted to civil aerospace research and development (notably Concorde), to nuclear reactor development; and some resources are

devoted to a wide range of industrial, agricultural and environmental research, in the Government's own research laboratories and also as grants to other research work in the private sector. In some other European countries, the composition is entirely different. But these differences are in the various Government's needs for research and development, in just the same way as the composition of the aggregate private expenditure on research and development results from the private firms' and organisations' needs. No Government decides how much research and development outside the sphere of basic research it will undertake, and then decides how this sum of money should be spent. The natural and correct procedure (unless there are over-riding physical limitations to the amount of research and development which the Government should undertake) is for the Government to decide in each of its areas of activity what research and development it needs to do. This is not a matter of "science policy" or "technology policy" at all: the determining factor is the economic and social objective of the Governments and the nature and amount of research and development that is required to carry out these objectives. The operation does not start with consideration of how scientists should be used: it starts with consideration of what Governments want to do, and how scientists can be mobilised to achieve these policies.

International Projects

39. For international agencies in Europe as elsewhere, the question is always whether it would be possible to make economies and to prevent duplication among the individual Government's research programmes by doing internationally what the individual Governments are doing nationally. Related to this is the question whether there are research projects of potential collective value which are not done because no single country wants them enough to finance them itself, or if they require resources far beyond the scope of a single country.

40. The European experience has been disappointing, certainly in the multinational projects. I am not here referring to the great Anglo-French military and civil aerospace projects, such as Concorde and Jaguar, or indeed to any of the aircraft projects. But the European space projects cannot be regarded as having been successful, and the only real multi-national success has been CERN, which has been from the start a basic research project, designed as a contribution to knowledge and not in support of economic or political or social objectives—that is to say, it is not really in the category which I am discussing.

41. The conclusion which I draw is that if a project has an assured economic or social benefit, the Governments of the larger countries will normally prefer to do it themselves, keeping it in their own hands, both for the costs and for the benefits. If there is no such assured benefit, and if the international project is an unprofitable one, launched for political or prestige or other non-economic

reasons, the members' motives for supporting it are likely to differ so widel that as soon as something goes wrong with the project (as is bound to happe in any large project sooner or later) they become nervous about whether the are going to get what they want from it and become critical of it, and th project is unlikely to come to fruition. The projects may be under way whe this happens, like the European space projects, or the disadvantages appe before the project ever starts; and in either case the result is neither frien ship nor understanding. In my opinion, the experience is strongly again ambitious multi-national scientific and technological projects; and I would m self be surprised if any were successfully launched in Europe in the ne decade. The more fruitful line of approach is likely to be to find fields which an international agency or an international financing programme cou help to solve specific problems which are troubling Governments or industri The emphasis should in my opinion be on finding research requirements fro Governments and other public authorities and private enterprises in Europe which action by an international agency can play a constructive part.

42. In the industrial field, I believe there are important areas which could explored with advantage. Obviously it is impracticable to enter fields whi raise important questions of business secrecy; or which are within the natu scope of the great European industrial organisations. But we found in t United Kingdom when we were considering very much the same kind of pr lem that there were many subjects of research to which no individual co pany was ever likely to devote its own resources but which would neverthel be valuable to a wide range of firms and industries; and if this is so of t United Kingdom, it might well be so for the extended Community. One su subject is materials research, a subject that comes near to the "basic researc category. Another is a variety of subjects, which in Britain are called "int mediate technologies", such as tribology, maintenance engineering, weldi corrosion—places in industry where improvements of practice could m great improvements for industry as a whole, and where the yield from edu tion and research can be very large. Another is computer software inf mation. These are all industrial subjects to which the United Kingdom Gove ment has devoted resources in recent years with a reasonable amount of s cess; and I list them here as illustrations of the sort of thing that might considered on a European plane.

43. I mentioned earlier the possibilities of cooperation between the vari public utilities in the Community countries—electricity, telecommunicati transport, airports. Is this cooperation likely to lead to requirements for search in excess of the facilities that these utilities have available? If so, th would be advantage in having a procedure available for placing and finan contracts. In my opinion, there may be a field here for cooperative researc what might be called the "pre-commercial" stage—the examination, example, of different kinds of transport system to form a judgment of wh may be the most promising line of development: this is work that indu

cannot do itself, for it is much too far ahead of the demands for industrial products; and which would involve great duplication if all the national public utilities tried to do it themselves. There is a Communities proposal for the creation of "common enterprises" largely in the public utility field which could be of considerable importance.

44. Again, standards and quality assurance, a field which must be cultivated intensively, but with great wariness lest it becomes a new barrier to trade within the extended Community. This subject is obviously suitable for collective treatment, for this would remove at one stroke the protectionist danger. But this needs its apparatus of research facilities. The essential point is that one does not begin by thinking how to find research work to do to occupy the Euratom laboratories or to stimulate European collective action: one starts with the responsibility for establishing standards and quality assurance procedures, and then considers the tools of technology which are required to carry out this responsibility.

45. Large research facilities will certainly be needed if the European Governments develop an active campaign against air and water pollution. In the United Kingdom, our Department of the Environment has its own Water Pollution Laboratory; and the central point for the clean air policy was the laboratory work. The question is whether Europe has enough research capability in this field to support a major campaign; and if so where it is and how it can be mobilised; and if not whether it would be desirable to provide central facilities or to finance the work centrally, or whether it is best left to the individual Governments.

46. Weather forecasting is another such subject, one of a number of interesting subjects initiated at the COST Conference in November 1971. But here again, the requirements for research must flow from the needs of those who have the responsibility for the work.

A European Technology Policy

47 At this point of the report, I must pull together my concept of what should be the technology policy of the extended Community. This may be expressed in six points

(a) The application of the tools of technology is of decisive importance for the objectives of the Community:
   - (i) economic growth, i.e. the increase in the standard of living of people of the Community, and the creation of the resources w[illegible] will enable the Community to play its full part in the world,
   - (ii) the improvement of the quality of life, all the main [illegible] which call for the application of the tools of technology much effectively than in the past.

(b) The technology policy should be based upon a positive and cooperative policy for Europe in the world, and should not be directed towards technological self-sufficiency.

(c) The spread of technology is achieved mainly by the creation of the common market, with particular reference in advanced technology to company law, patents, protection of trademarks, the removal of technical barriers to trade (e.g. the creation of a European system for standards and quality assurance, and prevention of protectionist devices purporting to stop pollution).

(d) Cooperation of public utilities and regrouping of the manufacturing industries which supply them in order to help a European widening of public procurement policies and a strengthening of these manufacturing industries.

(e) Policies for aerospace and computer industries based upon cooperation of public procurement and the creation of an effective European component in the organisations supplying the world market, and not upon European self-sufficiency.

(f) Technological research programmes should be derived from the needs of Governments and other institutions for research to carry out their responsibilities: we should not start by seeking "European" research projects but by developing the policies in Europe from which research needs may flow.

48. The proposal of this report, in short, is that the essence of a "European technology policy" is to make arrangements wherever this can be done for ensuring that the tools of technology are available and applied to deal with the problems of European Governments and industries, where appropriate on a Community basis. Technology is seen as a tool for handling the Community's problems, and not a subject in itself. It is the action to handle the problems that calls for the application of technology; and what is needed is an apparatus to ensure that technological resources are available when required, and not a "technology policy" as such.

Community Organisation

49. What is said in this report so far is consistent with my own experience in seeking to develop policy for technological development primarily in the United Kingdom but with substantial international implications also. In considering organisation, I start with much less assurance, for I am not yet familiar enough with the organisation of the Commission and the division of responsibility between the Commission and the member Governments to make an informed judgment on what should be done.

50. However, the organisation of the Commission seems to me well designed in the major relevant aspect for the purpose of this report, in that one Director-General, Mr Toulemon, is responsible together for industrial policy,

research and the environment. Thus, the organisation of the Commission avoids making an artificial distinction between "industry" and "technology" or between "the environment" and "technology". This fits in admirably in my opinion with the concept of treating technology not as a subject in itself calling for its own policy but as a tool to be applied to help solve the problems of industry and of the environment.

51. The policies in my paragraph 47 (a) and (b) are questions of approach, and do not require organisations as such. If the importance of the tools of technology for carrying out the Community's objectives, both internally and in relation to the rest of the world, is fully appreciated by the Governments and by the Commission itself, this would greatly affect the way in which they tackle their problems and the effectiveness with which they solve them

52. My 47(c) is part of the normal work of the Commission, though its powers may need to be increased to enable it to carry out these functions, particularly in relation to standards and quality assurance effectively.

53. For my 47(d), the public procurement conclusions call for much closer and more positive consultation and cooperation between the public utilities of the Community countries on the one hand, and the cross-frontier cooperation of manufacturing undertakings on the other. It would seem natural for the Commission to have a role in the former, if only as the provider of a convenient meeting-place; and this role could develop in time. The latter is of course an important element for the Commission's industrial policy, and if the policy in this report were adopted, the Commission would of course require to take this into account in dealing with specific cases in which the Commission's jurisdiction was required. For 47(e), aerospace is essentially a matter for Governments, and the centre of my proposals is in the defence field· computer policy is also a matter largely for Governments, but the public procurement aspects are very important.

54. Finally, in 47(f) many possibilities are listed to illustrate how requirements for technological research might develop from the work of Governments and public authorities and private enterprises and from work on the European plane. I cannot say how far the research establishments within the Commission's own responsibility could assist, and how readily an apparatus could be devised to place development contracts with member Government's own research establishments or with universities or private research facilities. The Communities are already formulating their ideas about development contracts, with the possibility of defraying the cost of some of this work, where it is clearly devoted to Community purposes, from the Community budget: there may well be an important role for the Commission in this field. But I must conclude by emphasising once more that this is not at all a question of "science" or "technology". If the extended Community—Governments and Commission—really tackle the Community's industrial and environmental proble

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vigorously to make the next ten years a period of great progress in carrying out the objectives of the Community, then there is no doubt at all that a great deal of research and development will be needed, and that the Commission will have a formidable task in ensuring that these requirements of research can be effectively satisfied. Technology will provide the tools, but it is for the institutions of the extended Community to decide whether they are going to make the progress towards the Community's objectives which will call for their fullest use.

THE DEVELOPMENT OF MULTINATIONAL COMPANIES: ITS ADVANTAFES AND DISADVANTAGES; ECONOMIC, SOCIAL AND POLITICAL MEASURES AND ADJUSTMENTS CALLED FOR

by

G. KRAIJENHOFF

M. F. SIMONCINI

L. DUQUESNE de la VINELLE

THE DEVELOPMENT OF MULTINATIONAL ENTERPRISES(*)

G. KRAIJENHOFF

I – THE MULTINATIONAL ENTERPRISE AHEAD OF ITS TIME

1. Stating the problem

We are living in a world where our thoughts and actions will be determined to an ever increasing extent internationally. It therefore sounds paradoxical to have to observe that it is precisely the multinational enterprise that is becoming the object of increasing criticism.

For a proper understanding of this paradoxical situation, a distinction needs to be made between two fields of tension. The first of them is located between enterprise and society. For the multinational enterprise is a second field of tension stemming from the fact that the multinational enterprise has an international standpoint. Owing to its international position, the multinational enterprise is confronted with the interests of the national communities in which it is active. Before going further into this situation, a definition is given below of what we understand by the term multinational enterprise.

2. Definition of multinational enterprises

The multinational enterprise is an enterprise which carries out business activities on a permanent basis in several countries and attunes these activities to each other.

This definition has deliberately been kept wide, so as to link up as well as possible with linguistic usage. Thousands of enterprises which are involved in the national economy in various countries through their more or less permanent local activities, come under the heading of multinational enterprises.

A characteristic of the multinational enterprise is the coordination of activities in the various countries. The activities belonging to the group are attuned to each other within the framework of common objectives and a common strategy.

Nothing is said in this definition about the degree of multinationality. Indeed, this may be highly divergent. At the foot of the ladder are the enterprises which are active in only a few countries and where the activities and business management are dominated by the country in which the head office is established. At the top of the ladder are the enterprises whose activities are open to influences from many countries and the management of which endeavours to give a direction, from a worldwide standpoint, to activities that are spread throughout the world.

(*) Translated from the Dutch.

THE DEVELOPMENT OF MULTINATIONAL ENTERPRISES(*)

G. KRAIJENHOFF

I – THE MULTINATIONAL ENTERPRISE AHEAD OF ITS TIME

1. Stating the problem

We are living in a world where our thoughts and actions will be determined to an ever increasing extent internationally. It therefore sounds paradoxical to have to observe that it is precisely the multinational enterprise that is becoming the object of increasing criticism

For a proper understanding of this paradoxical situation, a distinction needs to be made between two fields of tension. The first of them is located between enterprise and society. For the multinational enterprise is a second field of tension stemming from the fact that the multinational enterprise has an international standpoint. Owing to its international position, the multinational enterprise is confronted with the interests of the national communities in which it is active. Before going further into this situation, a definition is given below of what we understand by the term multinational enterprise.

2. Definition of multinational enterprises

The multinational enterprise is an enterprise which carries out business activities on a permanent basis in several countries and attunes these activities to each other.

This definition has deliberately been kept wide, so as to link up as well as possible with linguistic usage. Thousands of enterprises which are involved in the national economy in various countries through their more or less permanent local activities, come under the heading of multinational enterprises.

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The degree of multinationality will also be reflected in the financial structure of the enterprise. If assets and shareholders are spread over several countries, then the multinational character is reinforced.

The degree to which an enterprise unites several nationalities in the management is also *determinant for the nature of the management structure.* The enterprise in which the best man is appointed regardless of nationality has more right to be called multinational than the group in which national preferences prevail.

For the way in which a multinational enterprise adopts its standpoint, it is further of importance to make a distinction between multinational enterprises that have a centralised or a decentralised method of decision-making. In general, the principle of decentralisation is gaining ground. In a large international concern, flexibility can only be preserved by a great measure of independence and own responsibility on the part of the local managers. The central control exists on the basis of plans covering several years, budgets and management information systems and criteria. These instruments offer the possibility of coordinating group activities in the fields of research, production and sales. The most important investment decisions, the financing and the appointment policy for top officials generally remain a central matter.

According as the multinational enterprise applies a decentralised policy, it will prove easier for it to adopt a pluriform standpoint in the different countries in which it is active. An efficient policy formation, however, depends to a large extent on the type and function of the individual enterprise.

3. Typology and functions of multinational enterprises

(*a*) *Extractive firms*

Far back in history, enterprises already sought for sources of minerals and oils overseas in order to supply local requirements. In this case, the purpose of the foreign investments was to safeguard the supply of raw materials for processing and consumption by the firm itself. Obvious examples of this are mining companies, oil companies and food firms with plantations in tropical regions. The significance of this category of enterprises is of a twofold nature. First of all, in most cases long years of experience and know-how are present on the production side, which are further promoted by research. The strength of these enterprises also lies in an international distribution system that is built up. Moreover, the latter point does not hold true for natural products which are sold on the world market in that form.

(*b*) *The life-cycle enterprises*

Many American enterprises started to give an international slant to their activities after a certain saturation point had been reached on the advanced national market. In developing new markets abroad, it was possible to benefit from the know-how and experience already acquired on their own market. We

thus see that the major selling waves for washing machines, refrigerators and television sets in Europe followed, with some time lag, the initial sales peaks in the United States. In the last phase of the life-cycle of the product, the advance has disappeared, competition increases and the yield will decline. The group, which has meanwhile started operating internationally, will convert itself into the type mentioned under 3 and 4.

(c) *The synergic enterprises*

A number of enterprises have opted from the very outset for a multinational standpoint. Especially in Europe, several enterprises were obliged, because of the limited nature of their own domestic market, to adjust their activities beforehand to sales on various markets Firms which were willing or able to make this move were in general in a position to offer something specific. They had an advance over possible competitors, either of a technical or of a commercial nature. Many multinational enterprises now see their strength reside in a policy that is aimed at renewal, by means of research activity permanently geared to this. If it is desired to organise these research activities in an optimum way, then the cost must be spread over a maximum sales area In many cases, this means a decent share on the most important world markets. Conversely, this international spread of activities is expected to lead to a synergy, a favourable mutual influence and support for these activities.

Various factors further play a role in the decisions as to whether exports will be made to foreign markets or whether goods will be produced locally, either in the firm's own establishments or under licence. Factors that may be mentioned here are customs barriers, continuity, service to customers, scope of the market, local establishment factors, etc.

(d) *The internally specialised group*

A new category, which came to the fore especially in the 1960s, is the multinational enterprise which proceeds to increasing specialisation within the group. We see that the motor industry and the electro-technical industry already had establishments in many countries with local production for the local market. Gradually, shifts occur here, and this means that the different subsidiaries specialise in the manufacture of certain components, which are made for the world market. The assembly then occurs at a central point or, where this proves better, regionally or locally.

As appears from the foregoing, the multinational enterprises are in a position to make use of the relative cost advantages offered by each country. On the other hand, international specialisation and trade are promoted to an accelerated degree by this development.

(*e*) *The financially oriented enterprises* (conglomerates)

Many entrepreneurs have seen the multinational enterprise as a mean spreading. These risks may be of various types. Cyclical fluctuation occur simultaneously all over the world, so that an appropriate geo spread of activities is to the benefit of a stable development of t national enterprise. The risk of nationalisation is also reduced by t national enterprise.

It is mainly the multinational enterprises coming under types 4, 3 which there is the greatest need, from the point of view of business for a coordination of the group activities. In the case of conglom policy can be carried out in a more decentralised way, except for th aspects.

In the concrete multinational enterprise, we find in most cases a c of a number of typical features. The objectives of the multinational may however be highly divergent. Nevertheless, they all have or common: the constant seeking after an *overall*—in the sense of w optimum in production, research and distribution.

Within the framework of its own objectives, the multinational enter a number of social functions. Stated in general terms, the multinat prise plays a central role in the internationalisation of industrial d and other business activities. In this way, it contributes to the g spread of welfare. In addition, a number of specific functions tinguished.

First of all, the multinational enterprise has at its disposal an pool consisting of capital, management and technical experien production capacities and access to the world markets. The multin prise can always fall back on this pool and employ the best kn manpower. The pool available to the multinational enterprise is, r larly, of great value for the developing countries. With respect countries, the multinational enterprise acts rather as a clearing- transmission of knowledge and experience and the transfer of experts.

A second function performed by the multinational enterprise is trage. The multinational enterprise will take account of interna ences in costs and prices in its policy considerations. Labour-inte tion will be started up in low-wage countries, if the total pr distribution costs prove to be lower. Sales will preferably be co the markets with the highest yields. In this way, the multinatio contributes to a certain levelling-off, internationally speaking, in tion of the production factors capital and labour, as well as in tl final product.

A third function that may be attributed to the multinational enterprise is that of catalyst of new international structures in trade and industry. In the case of the multinational enterprise, new ideas and techniques are rapidly passed on by means of the international radius of action. Penetration on new markets leads to keener competitive relationships and the break-up of existing patterns. It is not only through the enterprise's own growth that an endeavour is made to achieve the most favourable possible structure from the overall point of view. In the 1960s, especially, an extremely large number of mergers and take-overs occurred among the big concerns. Structural adjustments in businesses and branches of activity were carried out at an accelerated pace. In cases where multinational enterprises were lacking, or were insufficient in number, we see that these structural changes either failed to materialise in certain branches of activity, or else were carried out to an inadequate extent.

I am thinking, for instance, of the textile industry, where a European or international regrouping could have brought about a considerable strengthening and concentration of forces.

4. Scope and development of multinational enterprises

Statistical data about the scope and growth of multinational enterprises are scarce and incomplete. We do indeed find reliable data with respect to the investments of US enterprises abroad, which would make up about 60 % of all foreign investments.

Annex I gives a survey of "US Direct Investments Abroad by Major Area". The total direct investments of US enterprises abroad show an increase from $ 40.7 thousand million in 1963 to $ 78.1 thousand million in 1970, which means that they almost doubled in seven years' time. Investments in industrial countries show a definitely greater increase than those in developing countries. The most marked growth occurs in the EEC, where American investments rose in the period under review from $ 4.5 thousand million to $ 11.7 thousand million, i.e., by 160 %.

On an overall basis, the spread of US direct investments abroad is now: $^1/_3$ in developing countries and $^2/_3$ in industrial countries. About $^1/_3$ is invested in Europe and slightly less than $^1/_3$ in Canada. The small amount of investments in Japan is striking: $ 1.5 thousand million in 1970.

From Annex II "US Direct Investments by Major Industries" it may be deduced that the investments in "Manufacturing" and "Other Industries" rose more quickly in 1963-1970 to a total of $ 50 thousand million than in the categories "Mining and Smelting" and "Petroleum".

Annex III lists "The Value of Foreign Direct Investments in the US by

Major Industry and Country—End of 1970". Of the total amount of $ 13.2 thousand million of investments in the US in 1970, $ 9.5 thousand million came from Europe. Investments from Europe have increased by about 50 % since 1967. Traditional investors in the US are Great Britain, the Netherlands and Switzerland, which account for 80 % of the investments originating from Europe.

As regards the total of direct foreign investments in the world, originating from free countries, only estimates are known. Jack Behrman in his book "National Interests and the Multinational Enterprise" estimates the total at $ 140 thousand million in 1969. Mr Judd Polk of the US Council of the International Chamber of Commerce comes to the conclusion, on the basis of rough calculations, that $ 1 of direct foreign investment yields about $ 2 turnover per annum. If we were to place the direct foreign investments at about $ 150 thousand million for 1970, then the turnover of foreign subsidiaries amounts to $ 300 thousand million, equal to the gross national product of France, Italy and the Benelux countries together, or 12 % of the gross national product of the free world.

It is a striking fact that the annual growth of the US direct foreign investments by approx. 10 % as well as of the European investments in the US by just over 14 %, exceeds the growth of the gross national product in the industrial countries. This indicates that the multinational enterprises are playing an important and growing role in the world economy.

The greatly increased industrialisation in the world is reflected in world trade, $^{2}/_{3}$ of which now consists of industrial goods. In the period 1963-1970, world trade increased annually by just over 10 %. Trade among the developed countries rose more markedly, by over 12 % per annum.

Attention is drawn to a remarkable phenomenon: the economic relations among the industrial countries are becoming ever more intensive and this applies to trade as well as to direct foreign investments. Developments in both fields are almost parallel, although one is inclined to assume that foreign investments are increasing somewhat more rapidly than trade.

As an explanation of the quite spectacular growth of the international activities of enterprises, reference may be made to three factors.

In the first place, a great many initiatives were developed after the war for regulating monetary and commercial relations, in which connection special mention may be made of the arrangements made in the IMF and the GATT.

Furthermore, regional integration—more particularly, the EEC—has exerted a powerful impetus on the internationalisation of European firms and on the penetration of American enterprises in Europe.

Lastly, technical progress in traffic and communications has stimulated the expansion of international economic activities.

The post-war period has been characterised by an almost uninterrupted and steep rise in welfare. One cannot escape the impression that the multinational enterprise, as linchpin of an industrialisation at the international level, has obviously made a powerful contribution to this growth of welfare.

5. Enterprise and society

The upsurge and penetration of the multinational enterprise in economic life give rise to tensions, as indicated in the statement of the problem. In part, these tensions do not relate specifically to the multinational character, but to the large enterprise and in general to the system of corporate production in the Western countries. The enterprise has contributed to an unequalled extent to increasing the prosperity. The growth of production has however been accompanied by disquieting secondary phenomena with respect to the nature and quality of our existence. Certainly in the Western industrial countries, the growth of prosperity is no longer regarded as solely a blessing. The wellbeing of human society is obviously being given priority over the increase in prosperity.

The "Rome Club" has pointed, not without reason, to the dangers of an exponential growth: exhaustion of the natural reserves and increasing contamination and destruction of nature. Many critics go so far in their calls for more wellbeing, better protection of the environment, and less work effort, that they tend to forget that their wishes can hardly be fulfilled without economic growth.

Indeed, few people will accept a decline in prosperity. Economic growth will, however need to be directed more towards the quality of existence. Waste products should be brought back into the economic circuit. The price and market mechanism and the financial yield calculations of enterprises, however, give inadequate expression to the sacrifices of a general and social nature which the community makes for the benefit of growth. The government will consider it as part of its task to take supplementary action here.

In the field of management and personal relations, too, new conceptions are called for as regards a say in matters, motivation, development possibilities and work relationships. The function of the enterprise is made subordinate in these days to the norms and ideas existing in the community; in other words, a process has got under way that may be described as an integration of the enterprise in society. If the enterprise comes to be open to social ideas, it will need to give its own form and content to them, adjusted to the function and method of the enterprise. Naturally, this process does not go ahead without a

hitch. Conflict situations arise mainly from the fear that large enterprises might have the power to disregard social norms and responsibilities.

6. The multinational enterprise and the national community

Naturally, this fear applies to an even greater extent to the even more "intangible" multinational enterprises, with head offices abroad where decisions are taken that affect the national interests. In this way, a second field of tension is created between the multinational character of the multinational enterprise and the national community.

The national community is unaccustomed to the multinational enterprise. The new element is equated with loss of identity and independence. The fear that the local subsidiary of a multinational enterprise may take insufficient account of the national objectives in the social, economic and political fields, results partly from ignorance of the purpose and method of the multinational enterprise. It is prompted partly by the assumed position of strength occupied by the multinational enterprise. Obviously, the behaviour of each multinational enterprise cannot always be defended, but the anxiety all too easily outstrips the benefits which the multinational enterprise confers on the local community, as explained in the foregoing.

Another cause of the field of tension resides in the changes in society which the multinational enterprise consciously or unconsciously brings about and the need for adjustment they entail. Penetration by the multinational enterprise is accompanied by the introduction of new ideas, techniques and methods of business management. In fact, the enterprise often bears the brunt of the demands made by science and technique. This technical progress has in fact constantly called in question the social and economic structure and the cultural pattern. The multinational enterprise here acts as an accelerator in the adjustment process. In contrast to the industrialised western countries, the arrival of the multinational enterprise in developing countries involves much more thorough changes which influence the entire pattern of life.

The tensions referred to above are triggered off mainly in the case of a dominant position of the multinational enterprise in the host country. This is practically never of a general nature, but is centred on a specific branch or market. In the case of multinational enterprises of American origin, for example, we may mention sectors such as computers, nuclear energy and space travel. There then exists in the host countries a fear of dependence and curtailment of their own development opportunities. The question remains, however, of how a better equilibrium can be achieved. A policy of aloofness may keep the foreign investors out, but it cuts off the country itself from advanced developments. More appropriate is an open-door policy, provided that national industry, by cooperation with foreign firms, gains access to the newly acquired

knowledge and its applications. The restoration of equilibrium must then primarily be sought by acquiring a prominent position in other sectors as a point of departure for an international division of work.

Tensions are also the consequence of the internationalisation of trade and industry, with which international cooperation in the political field does not keep pace. Naturally, the multinational enterprise is subject to the legislation and the executive authority of the country in which it is active. Each country, however, has only partially jurisdiction over the multinational enterprise, insofar as the activities within that country are concerned. For the group as such, with its overall strategy and flexibility, no international legal framework exists. Likewise, the argument is often used that at the international level the countervailing powers for creating a de facto situation of equilibrium are lacking. This argument however assumes a merely relative significance if the national countervailing powers which limit the multinational enterprise in its international freedom of movement are taken into consideration.

A number of international agreements exert an influence on the activities of the multinational enterprises, more particularly the GATT and the IMF. The purpose of the GATT was to promote international trade by a gradual dismantling of tariffs and trade barriers based on the most-favoured nation principle. The IMF—to put matters in a highly simplified way—played a complementary role with respect to payments on the basis of fixed exchange rates.

The GATT is mainly attuned to trade among the industrial countries. International economic relations have however acquired new characteristics. It is no longer exclusively a question of the abolition of trade barriers in favour of a free entry on the export market. The conditions under which industrial and business activities can be engaged in on the spot are becoming of ever greater importance. The social, economic and political climate exerts an influence on such questions as where investments occur, where activities are undertaken and what kind of industrial and economic structure is developed. It is the national governments that are responsible for this climate and that decide which national interests prevail in this connection, although international repercussions also play a role in the decisions.

Furthermore, the problem of the developing countries is being given increasing attention. In GATT and UNCTAD, adequate forms of cooperation between industrial and developing countries are being sought. Up to the present, however, coordination and cooperation in the field of international economic relations are incomplete, and there are consequently obstacles and discrepancies in the competitive relationships in the world.

The multinational enterprise can perform a useful function if it enables the local advantages to come to fruition in the pattern of an international division of labour. The artificial differences resulting from the lack of international

coordination in the political field will however exercise just as much influence on the behaviour of the enterprise. The multinational enterprise is then sometimes reproached for the fact that the intended effect of national policy, e.g., in the field of taxation, monetary movements or promotion of exports, is undermined. It cannot be denied that the national states are limited more than previously in their choice with respect to the instruments for the execution of a national policy, which means that the attainment of the national objectives in the social and economic field may also be impeded.

Conversely, the multinational enterprise will experience the lack of international cooperation and rules as a constant disregard for its multinational or global points of departure, as a national fragmentation and—all too often—a merely arbitary limitation of its field of action and as discriminatory treatment in cases where preference is given to a country's own nationals.

In this way, there exists an opposition between the multinational enterprise, which aims at optimum relationships within the internationally active group, and the national state, which feels itself to be primarily responsible for the wellbeing of its citizens. The same holds true for the trade union organisation, which will feel obliged in the first instance to defend the interests of its members. The responsibility of the multinational enterprise, on the other hand, applies to all those concerned with its activities,—shareholders as well as workers from different countries. Its point of departure is thus essentially international.

To sum up, it may be stated that the multinational enterprise has to a marked degree outstripped the developments in the political, social and institutional field. This poses a dilemma: must the multinational enterprise adjust itself to the demands made by the national economy and society, or conversely, should —for example—governments and workers adopt an international approach? We shall try to give an answer to this question, more especially in chapter II.

7. Interplay between government and industry

The national government is confronted with multinational enterprises with a turnover that is sometimes higher than the gross national product and which shows firmer growth than the national economy. The sentiments that are felt about the multinational enterprise are mixed. On the one hand, there is the fear that the nation's own policy will be threatened with the danger of being undermined by the strength and flexibility of the multinational enterprise. On the other hand, the utility of a multinational enterprise is recognised. It can bring employment and prosperity, reinforce the industrial pattern and ensure transmission of knowledge and experience. The attitude of a country will differ depending on whether it acts as country of origin or as host country. The position differs yet again if the headquarters of a relatively large number of

multinational enterprises are established in one country, or else if a developing country is dependent on the readiness of foreign enterprises to invest.

Government and enterprise are, from many points of view, interdependent. The enterprise regards the government as a valuable partner, for example, for cooperation in the research field, government contracts, infrastructural arrangements for the benefit of investment projects, and protection in respect of trade policy. The government seeks to create an economic and industrial climate such that the entrepreneurs' activities will be harmonised with the objectives of government policy. The government needs the enterprise for the performance of its tasks with respect to full employment, monetary stability, balance of payments equilibrium, social justice, optimum growth and improved living conditions, but above all as primary source of income and prosperity.

An extensive range of means are available to the government, varying from general legal provisions to voluntary consultation and cooperation. The government may expect the multinational enterprise to conduct itself as a good citizen. In the case of observance of legal measures, the multinational enterprise will find this an obvious matter. An exception must be made for conflict situations in which the multinational enterprise is compelled by host country and country of origin to follow prescriptions that contradict each other for subsidiary and parent company respectively. In these cases, national laws have consequences reaching beyond the borders. Examples are the anti-trust legislation in the US and the restrictions still existing in that country on the supply of strategic goods to East European countries.

Not so much from the point of view of legal measures, but precisely at the level of voluntary contacts and interplay, the government will want to be ensured of the complete cooperation of the multinational enterprise. A careful harmonisation of tasks and activities may give rise to difficulties if the local establishment of a foreign enterprise is sensitive in the first place to the indications it receives from the parent company. Conversely, the multinational enterprise wonders whether the host country is prepared to involve the subsidiary company in the stimulation of development in certain branches of industry by research contracts, supplies or even subsidies. A great many questions arise here, such as: who profits from such activities and do they in fact prove entirely to the benefit of the host country?

The community expects the government to be increasingly attentive to social objectives and to render them valid in the interplay with enterprises. The government will want to acquire certainty on this point, without in general going so far as to occupy the entrepreneur's seat itself. Nor is the government in a position to link the conduct of the entrepreneur in detail to legal provisions. There thus always remains a great measure of necessary scope for the entrepreneur, on which the government, if it might prove necessary, will wish to exert an influence. In the case of the enterprises, a notion of responsibility

towards society is assumed, which weighs heavily in the balance when policy decisions are taken. Certain governments are afraid that a frank exchange of views with subsidiary firms of foreign enterprises will involve a greater risk.

Bringing the local subsidiaries under the national sphere of influence also has its limits. The advantages of a multinationally operating group of enterprises must be maintained optimally. The countries concerned also benefit here.

8. What is the standpoint of the trade union movement?

In the same way as the national governments, the national trade union movements are also anxious about the multinational enterprise which has grown beyond the bounds of national relationships. By comparison with the local enterprise, the multinational enterprise has more freedom in its decisions about where know-how is to be applied, in which country investments are to be made or cheap labour to be recruited in developing countries. Activities and results in a given country are regarded as a component of the group interest. Once again, this freedom should not be overestimated. The multinational enterprise has so many local links that the policy is aimed at growth and continuity of existing establishments and in the interest of the workers concerned. The elimination or abolition of activities will, in the case of multinational enterprises, only occur in greatest emergencies or when there is a conviction that the development of certain sub-activities can obviously be better carried out in another group.

The greater flexibility of the multinational enterprise comes to expression mainly in the case of new activities. The trade unions nevertheless experience this situation as a weakening of their position. In addition, the trade unions do not always have a clear picture of the position and policy of the group. If the local entrepreneur is the negotiating partner of the trade unions, then the impression may be given that negotiations do not occur at the decision-making level in the enterprise. The reverse is generally the case. It is precisely the national management that is acquainted with the local situation and it will have a decisive voice in negotiations with the national trade union.

More particularly, the International Federation of Chemical and General Workers' Unions (ICF) and the International Metalworkers' Federation (IMF) want to create a counterpart to the multinational enterprise by developing an internationally interlocking trade union federation. Their activities are aimed at providing the local federations with better background information about the position of the multinational enterprise concerned and the branch of industry in wage negotiations, as well as at organizing campaigns supporting each other internationally. The difficulty remains, however, that the international trade union federations are dependent on the approval of the national organisations, which consider themselves to be responsible for defending the interests of their members.

The national trade union organisations in general still show little interest for the work of the international trade union federations. Social opinions, relationships and working conditions are highly divergent from one country to another. International interests can hardly be brought to a common denominator. International solidarity among the workers also has its limits. Reality obliges one to recognise that it will certainly still be a long time before the international trade union federations can act as equivalent negotiating partners with the multinational enterprises. Within the limited framework of the EEC, however, there are more prospects of increasing cooperation beyond the borders in the trade union movement.

It should give no cause for surprise that the national trade unions primarily want to defend their interests within the limits of the national economy or the local firm. It may not be deduced from this automatically that the trade unions would be blind to the international consequences of their national approach. This is indeed the case when over high wage demands are made that may give rise to protectionist measures. These in turn affect the colleagues abroad and invite retaliatory measures. For the multinational enterprise, the question then arises of whether existing or planned activities can be maintained. In some cases, it may be possible to profit from a protected market position, although exports will come to be jeopardised. In any case, such a protection of the national economy means an impediment for the multinational enterprise precisely in the field where it can play an important role: the international division of labour and the intensification of economic relations.

The trade unions will want the multinational enterprise to identify itself with the local interests of the workers; the multinational enterprise will expect the trade unions to be aware of the international repercussions of their demands. Furthermore, the multinational enterprise will have to enable the interests of all the groups involved in the multinational enterprise to be safeguarded. An understanding for this point is a condition for the development of close relations between the multinational enterprise and the trade union.

II – INTEGRATION OF ACTIVITIES OF MULTINATIONAL ENTERPRISES IN NATIONAL COMMUNITY

1. What solutions qualify

In what way can a contribution be made towards decreasing the tension between the multinational enterprise and society? In the previous chapter, we explained that a hiatus has been created between the multinational enterprise which is a forerunner in the process of internationalisation and the political and social forces which have remained more national in their orientation. From which side must the bridging-over mainly come?

In various quarters, a code of fair conduct is thought of as a solution to this problem. Opinions are highly divergent about what precisely should be the content of such a code. The whole question is whether it is possible to arrive at the formulation of standards which give some foothold and which do not lapse into vague generalities. Even apart from this, the significance of a code of fair conduct may be doubted, if it were to be drawn up from the employers' side. The code will remain unilateral and arbitrary in nature as long as the national governments, trade unions and other interested parties are not involved in it to an adequate extent.

Nor does a statute for the multinational enterprise that would, for example, be made to depend on the United Nations, offer a way out. It does not look as though the member countries are prepared to transfer their competence with respect to the conduct of the multinational enterprise to an international body. This would mean that the national interests would be subordinated to his global authority. Some day, perhaps, these hypotheses will become reality, but not immediately.

What steps can indeed be considered now that the tension between multinational enterprises and the national community is increasing?

An improvement to be made to the present situation could be the creation of an international agreement among the countries with respect to the fiscal, monetary and establishment demands to be made on the multinational enterprises. This will, it is true, somewhat limit their freedom of movement. On the other hand, it will considerably diminish the tension between the multinational enterprises and the national community, especially in cases where this is based on the fear that the multinational enterprises will play off the national societies, with all their differences, against each other. It may also reduce the disadvantage of many kinds of national arrangements in the above-mentioned fields, which form a considerable obstacle to the attainment of a worldwide optimum within the multinational enterprise.

A first requirement for decreasing the tension between multinational enterprise and society is, however, that the enterprise should practise great frankness. It is also in the interest of the multinational enterprise that unfounded criticism and suspicion should be removed. More information which is relevant for the local community needs to be provided about the activities and long-term objectives of the group as well as about their significance for the country in question.

Furthermore, the multinational enterprise must be prepared to engage in discussions of this matter with local authorities and bodies. Both the multinational enterprise and the national community will benefit from a permanent dialogue with a view to bridging over the possible oppositions by means of cooperation.

This presumes a positive attitude towards the integration of the enterprise in society and the ideas and aspirations existing therein.

The best solution is to link the interests of the subsidiary enterprise in a permanent way with the fate of the host country. This is attained by means of the multinational enterprise meeting as much as possible the national wishes for participation in the capital and management. Conversely, the national community obtains hereby a means of influencing policy in the enterprise.

2. The open subsidiary a bridge for industrial countries

For the formalisation of such a local cooperation between multinational enterprises and society, the most appropriate means is the open subsidiary. This term is to be understood in the sense that, in addition to the participation by the multinational enterprise, the share capital in the subsidiary is spread over a large number of shareholders and that this enterprise is listed locally on the stock exchange. Furthermore, the local element will be amply represented in the management. Such a set-up leads to an engagement of the local enterprise *vis-à-vis* the national community.

In this connection, we act on the assumption that the EEC may be regarded as a national community. The open subsidiary then qualifies primarily for the major industrial regions of the world: the US, the EEC and Japan Many European firms have already used the form of the open subsidiary for their activities in the US. Our views amount to the fact that the multinational enterprise with headquarters outside Europe, but which is active in Europe, proceeds to the floating of shares of its European subsidiary. Until such time as there exists a European stock exchange, a parallel listing on several stock exchanges in Europe will promote the spread of the shareholding and accentuate the European character of the open subsidiary.

The engagement envisaged finds expression in:

(a) *Internal organisation and decision-making*

The national element represented by shareholders and workers involved in the open subsidiary must be concerned in the decision-making. A condition for this is a decentralisation in the decision-making to geographical units. Furthermore, the open subsidiary will have to be given a say at the central level when common interests are at stake with which local aspects are linked. The geographical element in the organisation of the group could find its reflection in, for example, an international advisory board. The international character of the group will be reinforced thereby.

How far may this geographical decentralisation go without jeopardising the

on. The independence of the subsidiary within the group is partly de-
ned by the fact of whether there is a question of a majority or a minority
ipation. In the case of multinational enterprises where the emphasis of
entral strategy and coordination is on the financial level, it may be ex-
d that there will be more readiness to accept a modest participation than
: case of multinational enterprises with a more central coordination at
ndustrial, commercial and technical level. The majority of the types of
national enterprises, however, derive their strength from the international
onisation of sub-activities among each other. Consequently, they will
d a participation which also provides them with a possibility of control,
ondition for the carrying-out of an international management.

dvertising

pen subsidiary will have to comply with stock exchange regulations and
publication obligations. Not only will the open subsidiary have to provide
cation by publication of the annual figures, but it will also have to supply
ditional quantity of specific information about local activities. There are
des to the question for the multinational enterprise here.

e one hand, it will have to provide more information, split according to
aphical sub-activities, belonging to the field of action of the open sub-
y.

ie other, the managers' feeling of responsibility increases now that they
ave to give an account of themselves not only internally but also ex-
ly.

latter factor may mean an extra incentive for achieving satisfactory
s.

stablishment of subsidiary's own result

nportant advantage of the open subsidiary is that suspicion can to a large
: be allayed with respect to a supposed "passing-on" of profits, the evasion
: payments and manipulation of settlement prices. The responsibility
ds minority shareholders requires the result that can be ascribed to the
establishment to be fixed as clearly as possible. In this connection, the
nent prices for mutual supplies in the group will need to be calculated on
nmercial basis. It is obvious that this will not always be a simple matter.
nutual settlement of research costs, technical and other advice, exchange
ow-how and experience, is also difficult to arrange. It must however be
le to arrive at the drawing-up of certain rules of conduct within the
. Furthermore, it is also advisable, in the internal field of legal and com-
al arrangements, to be circumspect about an exaggerated geographical
ng-up of activities.

3. National influence may not nullify the advantages of the multinational enterprises

We are aware that the open subsidiary is not a panacea for eliminating all problems between the multinational enterprise and the national community.

In the first place, we may not forget that operating with several more or less independent subsidiaries imposes big restrictions on the freedom of movement of the multinational enterprise. It may indeed be asserted that this is the sacrifice that the multinational enterprises must make in order to meet halfway national feelings and wishes. But this sacrifice may in some cases be of such a nature that under certain circumstances the multinational enterprise will prefer to abstain from foreign investments. The loss of freedom of movement is mainly unattractive for the multinational enterprise which especially wishes to attain the advantages of working on a international group basis through internal specialisation and synergism The possibility of attuning sub-productions and research activities to an international market policy must prevail here. Geographical fragmentation must be avoided.

This applies in particular to Europe, where a flexible adjustment to changing circumstances must remain open for the multinational enterprise The integration process as well as technical progress oblige the multinational enterprise to carry out further structural changes within Europe. Sometimes this means enlargement of scale or concentration of certain production processes. In other cases, the policy is directed towards specialisation and standardisation It will not always be possible to allow all activities to grow of their own accord to optimum relationships. It may be expected that, via acquisitions and transfers, many other shifts of activities from one group to the other will prove necessary, mainly beyond the borders. Has not European integration precisely the goal of attuning industrial activities to the new dimensions of the common market?

4. *Developing countries and the joint venture*

The multinational enterprise plays an irreplaceable role in the transfer of knowledge to developing countries, including industrial application and marketing. On the other hand, the developing country, with an economy that is not very far developed and of modest scope, is highly sensitive to the powerful position of certain multinational enterprises.

The integration of activities in the national economy, which was recommended in the foregoing for the industrial countries, applies to an even more marked extent to developing countries. Application of the principle of the open subsidiary is however a complex matter in developing countries. In the majority of the latter, the capital market is inadequately developed for the incorpora-

tion of an open subsidiary. Furthermore, big risks are incurred in the case of new establishments, so that interest for participation in capital may be slight. If nevertheless a multinational enterprise wishes to involve others in the financing, then recourse will be made to development banks and funds as well as to partners with substantial capital. In such circumstances, we speak of a joint venture, i.e., there is cooperation with a local partner who, apart from capital, will also contribute—if possible—local knowledge and experience to the management as well. If at the time of establishment in a developing country, the local partners and sources are not directly present for the formation of a joint venture, then the latter can only be set as target for a subsequent period.

The joint venture is in general for a developing country or, better still, a regional group of developing countries, one of the most suitable forms for promoting the integration of the activities of the subsidiaries in the host countries. A drawback may be the fact that the capital participation is limited to a few individuals. Two paths are open in order to augment the local involvement in the joint venture. Firstly, spreading of blocks of shares, initially taken up by development banks, among the public. Furthermore, it is of great importance for local integration that the personnel policy be aimed at inclusion of local manpower and training for higher management functions.

A serious obstacle to investments in developing countries resides in the frequently oversmall market of the developing country in question. Production solely for the domestic market is then not interesting. It cannot sufficiently be emphasised how important it is for developing countries to join together for the creation of regional markets and to coordinate the investment policy. In this way, the transfer of capital and technology will be greatly promoted.

Furthermore, the multinational enterprise is afforded the possibility of establishing the joint venture per region, with better development chances and more freedom of movement. If the multinational enterprise has to limit itself to local sources and possibilities, then local production is often only possible if it can be regarded as an integral component of the group activity. According as this situation occurs, the multinational enterprise will aim, for the benefit of an integral management, at having at its disposal a controlling interest in the joint venture.

The joint venture offers a good opportunity of combining the interests of the multinational enterprise and the host countries. If, despite this, internal oppositions were to arise between parent and subsidiary, then the joint venture offers the advantage that it obliges the parties concerned to take account of each other's standpoints so as to arrive at a joint approach to the problems. But definite rules will then need to be drawn up. The joint venture may not become the plaything of political forces and it needs to remain outside party politics. The partners must further be prepared to help finance expansion, to which the dividend policy must also be attuned.

The joint venture may be regarded as a preventive medium for the entire or partial expropriation or nationalisation of enterprises. Our attitude towards nationalisations or an obligation to divest oneself of interests in developing countries, such as is being introduced, for instance, in the Andes countries, is definitely one of rejection. Such a liquidation of interests is generally an operation involving a loss for the multinational enterprise, and certainly when this occurs quite unexpectedly. The continuity of the enterprise is also endangered, if the multinational enterprise withdraws from the management. The policy of expropriation overlooks the fact that a dynamic firm is subject to a process of continuous renewal. The amputation of the local activities of the multinational enterprise is a status quo solution, which leads to a stiffening of attitudes. The split is diametrically opposed to the increasing international interconnection of technique and industry, which naturally serves neither the purpose of the multinational enterprise nor of the developing countries themselves.

III - EUROPEAN UNITY A CONDITION FOR EXISTENCE OF MULTINATIONAL ENTERPRISES

1. Structure in course of creation

In the foregoing it is argued that within the EEC the national conception is giving way to a European approach to the question of the multinational enterprise. The adjustment to European conditions must come from the multinational enterprise but in particular from the national political and social groupings.

To regard the EEC as a unit similar to a national community is a fiction, at least for the time being To reach this end, a great many psychological, political and economic hurdles will still have to be cleared. We therefore do not wish to overlook the specific problems which the European Community in course of creation raises with respect to the multinational enterprise.

While it is true that the customs union is attained and the monetary and economic union is planned for 1980, the fact remains that the economic and industrial policy and in particular the social policy is still almost entirely a national matter. This reality is in sharp contrast to the original aims of the EEC. The intention, as indicated in the Spaak report, was above all to create a framework for more optimal relations in industry and branches of activity, attuned to the greater dimensions of the common market.

A number of multinational enterprises have nevertheless seized this opportunity and have emerged as pace-makers for a European restructuration. This has occurred despite the still existing obstacles which arise in the case of mergers

and acquisitions beyond the borders. The very necessary structural adjustments, however, have only partly come about.

The competition of large internationally operating enterprises, which have established their headquarters outside the EEC, mainly in the US, also provides an incentive for reinforcement of the industrial structure. In its memorandum on "The Industrial Policy of the Community", submitted to the Council in 1970, the European Commission asserts that a higher degree of concentration is necessary for an optimum development. In addition, the Commission warns against the restrictions and onesidedness of national concentrations. The regrouping and adjustment of firms by mergers and other forms of industrial cooperation mainly occur in a national framework.

The formation of a free common market and the abolition of market distortions and discriminations have evidently not been adequate. Thresholds for the existence of what the Commission calls European transnational enterprises are therefore located at the psychological level, including linguistic problems, mainly in the field of

(a) taxes
(b) legislation
(c) capital and money market.

2. Thresholds for industrial cooperation and adjustment

A further fiscal harmonisation could considerably improve the cooperation among enterprises in the European context. Fiscal obstacles to mergers can be removed if the Council of Ministers adopts the draft directives of the European Commission with respect to mergers as well as to the taxation arrangements for parent and subsidiary companies.

In fact, we should go a step further in the EEC, i.e., by the adoption of a common regulation for the avoidance of double taxation in the case of international concerns. This presumes the establishment of a system of settlement prices and passing-on of costs which would be applied, for example, by a head office or research laboratory. Consultation among the member states in case of differences of opinion about settlements applied within a concern connects up with this. An EEC arbitration board would promote a uniform interpretation of the regulations.

Although the standpoint is defended that a European limited company is not indispensable, it is at least of psychological importance when it is a question of mergers beyond the borders or establishment of joint subsidiaries. A European limited company presupposes, indeed, that European legal conceptions and standards will be set up. In contrast to a national limited company, which

determines the decision-making and responsibilities in a national way, the European limited company requires consideration of European views and conceptions. At the same time, this points to the difficulties involved. Indeed, the European limited company can hardly come into existence if there is no common opinion on matters such as rights of shareholders, workers, directors and management.

For the time being, each country follows its own course. Thus, in the Netherlands a new corporate structure has been introduced, substantially opening the way to codetermination within the enterprise. In contrast to the system existing in the large German firms whereby a number of directors are designated directly by the workers, the Netherlands legislation grants a right of objection both to the shareholders and to the workers in the appointment of directors, a board which is self-electing. Furthermore, a holding company, whose employees are predominantly located abroad, is exempted from these provisions. The new regulations are aimed at ensuring that directors do not promote sectional interests and that the unity of management in the enterprise is not jeopardised. We shall have to wait and see how this system functions in practice, and one of the questions may certainly be whether a balanced composition of the board is obtained and whether the Board of Directors will fulfil its purpose. In view of the different national legal prescriptions and divergent conceptions, a European legal form only has a chance of success in the case of a regulation that is not too detailed, but flexible. The draft now submitted is not free from these objections. The gradual establishment of a European money and capital market will considerably benefit the financial capacity and flexibility of European firms.

For the enterprise operating in several European countries, it is of great importance to be able to change over to a European cash management system. This means that all the European subsidiaries belonging to the multinational enterprise are affiliated to a central bank account, whereby balances can be set off against each other and the total supply of liquidities is as the disposal of the group for investment or reserves. A necessary condition for this is that European banks or combinations of banks are prepared to intertwine their circuits. Such a system can only function properly with mutually fixed European exchange rates, freedom of transfer for cash and mutually harmonised levels of interest rates. It is obvious that a European cash management system cannot come about without a commencement of monetary union.

It may be wondered whether the creation of a European capital market is indeed such an urgent requirement, in view of the possibilities of the Eurodollar market. The multinational enterprise with a sound financial structure can in general turn to the Eurodollar market for borrowing purposes. The introduction of these funds into national circulation, however, is subject to all sorts of licences and restrictions. This arsenal is used to combat inflation, i.e., by protecting the national economy against import of foreign capital. The

monetary upheavals and the emergence of flight capital led in 1971 to a considerable sharpening of these measures and further compartmentalisation of the money and capital markets. With the restoration of balanced monetary relations in the world, the recent restrictions in capital movements will also need to be lifted. International discussions about liberalisation of capital movements will contribute to this.

The establishment of a European share market is an important matter. For the majority of the multinational enterprises, the domestic market is too small for the attraction of risk capital. The goal of many multinational enterprises is to find a reflection of their multinational character in a widening of the financial basis. International spreading of share ownership is becoming ever more important now that it has been found that in the 1960s the largest European firms made use to an increasing extent of borrowed assets for the financing of their expansion. In the case of the European firms appearing on the "Fortune" list of the 200 largest industrial enterprises outside the US, the own funds outside funds ratio fell from an average of 0.81 in 1966 to 0.63 in 1970. A further deterioration of the own funds/outside funds ratio is in general regarded as unsound. Account must also be taken of a decrease in corporate earning capacity, certainly as regards the activity in a number of countries and sectors, which limits the self-financing possibilities.

It may be assumed therefore that the multinational enterprise stands to benefit even more than in the past from smoothly functioning European share markets. There is still much to be done in this respect. Until such time as it proves possible to arrive at European stock exchanges, the following measures are recommended:

(a) Uniform stock exchange and publication regulations for listed securities, as regards, inter alia, publications of annual documents and the valuation principles to be applied in this connection, as well as prospectuses.
(b) Abolition of fiscal discriminations. The European Commission has already made proposals along these lines for harmonisation of the tax levied on dividends and interest payments. In this connection, it must be pointed out that in any case the creation of new distortions must be avoided. The latter would arise if action were to be taken on the plans existing in Germany for deducting company tax from the income tax owed by the shareholder residing in Germany. Foreign shareholders cannot benefit from this arrangement, or only to an unequal extent. Furthermore, it is important that, in the framework of fiscal harmonisation, the distortions existing with respect to this point, for example in France, should be eliminated.
(c) Abolition of the restrictions, affecting mainly institutional investors, with regard to purchase of foreign securities.

3. From national to European industrial policy

The restructuration of European trade and industry will be promoted by the removal of obstacles in the fiscal, juridical and financial field. The question is whether this is sufficient. The Commission has presented its views on this subject in detail in the Memorandum on European Industrial Policy, already referred to above. It would take us too far to go here into the many points that affect the multinational enterprise. The question always arises, however, of whether the government must proceed to an active structural policy and if so, to what extent. Opinions on this point are rather divergent.

For facility's sake, we should like to take the actual situation as point of departure. It is observed that in all European countries the government deals actively with an industrial structure policy. This in itself is already sufficient reason for the European Commission to take coordinating action in this respect in the light of common objectives. This coordination is indispensable because the national framework is too small to enable optimum conditions in production, sales and research to be reached. Furthermore, major technological projects will need to be tackled collectively. Lastly, a disjointed national policy may have upsetting and discriminatory effects.

Sectorial and regional policies are good examples of a European approach which had been lacking so far. The conditions under which sectors in difficulties are given support by their national authorities are highly divergent in Europe. Usually, demands are made with respect to reorganisation and improvement of the survival chances of the enterprise. Solutions are then sought or prescribed within the national framework. Good examples are shipbuilding and the textile industry. It is obvious that in stagnating branches of activity, the government may, by granting support to firms in difficulty, easily encourage surplus capacity to the detriment of foreign competitors. A better coordination with a view to limiting the sectorial aid is urgently needed, if we ever wish to arrive at an overhaul of a number of branches of activity at the European level. *The sectorial aid will in general need to have a degressive character and* may only benefit the viable firms.

In certain EEC countries, an active policy is applied in order to prevent difficulties in branches of activity. This occurs in general through planning and structural surveys by region or by sector. The follow-up is either aimed at through an overall policy or else through a more direct intervention via, for instance, investment banks and government participations and enterprises. Here too, there is no mention, or hardly any mention of a European approach and the search for European solutions. The danger of distortion of competition is far from imaginary. Preferential treatment of government enterprise occurs without there being any opening-up of businesses. In this way, artificial structures are again maintained, which not only operate in a discriminating way but also impede the adjustment to sounder relationships.

The European Commission is already active in the field of forecasts and sector studies. Further expansion and intensification may proceed in the direction of technological forecasting and subdivision of the overall medium-term projections into a number of sectors.

It is certainly to be recommended that European trade and industry should be more closely involved in these studies.

A difficulty that remains, however, is the inability of the Commission to apply in practice the opinions obtained and the results stemming from the studies. The Commission is almost entirely dependent, for the execution thereof, on its power of conviction with the member states and with trade and industry. This makes a close interaction among the parties concerned even more desirable. It is certainly also in the interest of the multinational enterprise, which is precisely in favour of a European approach to the problems, to show in this connection the same frankness as is usual in relations with the national government.

The European Commission would in any case need to arrive at a better coordination of the sectorial policy. It is perhaps worth considering whether the European Investment Bank, in a somewhat modified role, should be afforded the opportunity of participation in national investment banks. This need not lead to supervision, but indeed to a better interaction in the case of financial support for structural adjustments and mergers.

Another example of coordination that is still inadequate is regional policy. This has even degenerated into a competitive struggle among regional authorities, who quarrel with each other about the establishment of new firms by means of attractive subsidies and facilities. The Commission has rightly proposed that these subsidies should be limited to a maximum of 20% and that the policy should be harmonised, which has been accepted by the Council in principle. Rendering subsidies transparent is now an initial requirement in order to avoid distortion of competition, inter alia, through a combination of regional and sectorial aid. For the multinational enterprise, it is also of great importance that the long-term objectives of regional policy and regional planning should be established at European level, so that account can be taken thereof in its own policy.

There is unfortunately little trace of a European approach in the stimulation of branches of activity in the field of technological progress. Each European country of any importance supports its own computer industry by subsidies and mainly by reserving government contracts for the national industry. The experience acquired with Euratom is perhaps not greatly encouraging for new initiatives in the field of a large-scale technical cooperation in highly promising sectors. Fortunately, however, there have been some initiatives. Although of a modest nature, progress has been made in sectors such as the aircraft industry

As already pointed out, the European firms are involved in a process of necessary adjustment to European conditions, which may still be expected to result in a flow of reoganisations and overhauls which, without an accelerated establishment of a common labour market policy, will lead to unnecessary social tensions. It is obvious that the European Social Fund as well as the recently established Committee for labour Market Problems will play an active role here.

Attention is also being paid to an improved living climate, in which the need for protection of the environment is felt especially. The national framework is not sufficient to solve the problems of air and water pollution arising in this connection. For social reasons, but equally well for competition considerations, it is desirable that common objectives and standards should be drawn up in the EEC and national measures coordinated. The harmonisation of regulations would need to include taxation inceptives in order to promote an effective approach to environmental problems.

5. Economic and monetary union

After a transitional period, in which a customs union was established, a period is now dawning in which industrial integration will have to be achieved. By the creation of a suitable European industrial climate, the multinational enterprise must be enabled to make an optimum contribution to the increase of prosperity in the EEC. The objectives of social and economic policy will have to be clearly formulated in the EEC, so that the multinational enterprise can attune its policy to them. The establishment of an economic and monetary union makes it urgently necessary to develop a clear vision of the future of Europe. It also offers the prospect for a common policy, indispensable for a smoothly functioning common market, a more uniform industrial climate and stable relationships based, inter alia, on a European monetary unit.

Already partly outstripping this development, the policy of the Commission will have to be directed towards the promotion of transnational mergers by the removal of thresholds and an active coordination of the industrial policy in the EEC countries. A number of concrete measures benefit the operation of the multinational enterprise, as indicated in the foregoing. The application or the full effect of these measures is in most cases, however, dependent on the creation of the monetary and economic union. For the multinational enterprise, therefore, this economic and monetary union has a significance that is not to be underestimated.

Our ideas about accommodating the European interests of a multinational enterprise in a European subsidiary are even to a marked degree dependent on the creation of an economic and monetary union. Solely for this reason, the chance exists that a society will be developed in the economic and social field

with a sufficient degree of integration to justify a European view of and a European approach to the problems. The interests of the multinational enterprise are perhaps directly involved, more than the political and social groupings, in the further integration of Europe. The larger firms could act as promotor to a certain extent. Furthermore, it is necessary to realise that the success of an economic and monetary union depends on the readiness of the government and the social partners to aim at European solutions, in the relevant consultative bodies, in the interest of our European society.

IV – THE MULTINATIONAL ENTERPRISES IN THE WORLD PICTURE

1. Interests are parallel

In the foregoing parts of this report proposals are made with a view to adjusting the conduct of the multinational enterprise better to the national circumstances, policy and aspirations of the community in which it is active. In addition, it was pointed out that the adjustment capacity of the multinational enterprise has its limits. If disproportionately high demands are made, the activities of the multinational enterprise are fragmented regionally and it is precisely the advantages of the enterprise in the multinational context that are lost. It also means that the multinational enterprise may feel obliged to withdraw from certain activities or to renounce new projects.

Fortunately, the interests of the multinational enterprise and the national economy to a large extent run parallel, insofar as the multinational enterprise is the backbone of economic development. It has already been observed that the growth of the multinational enterprise was greatly promoted after the war by abolition of the obstacles to international trade, as well as by regional integration. It was also a period in which the practically uninterrupted growth of welfare was able to reach an extremely high level. This indicates that the multinational enterprise and the national economy derive benefit from a further intensification of international relations. It is therefore precisely in the interest of the industrial countries to give the multinational enterprise, or to allow it to keep the necessary elbow-room, which is indispensable for the exercise of its various functions, as described in an earlier passage of this report.

Conversely, the multinational enterprise is sensitive to stable international relations to which it can attune the longer-term policy. But the same holds true for the national economy. Here too it will be desired to avoid the risk that certain countries, in the absence of proper agreements, will attempt to intervene in international relations in their own favour and as they think fit.

The conclusion is obvious that in particular the Western industrial countries would need to aim at a world system in which at least a number of basic

principles would have to be generally accepted. These principles should not be confined to the field of international trade, concerning which several international agreements have already been concluded. They would also need to extend to foreign investments. The development of these principles in the subsequent part of the report is limited to the industrial countries, on the assumption that the problems of the developing countries will be dealt with by other rapporteurs.

2. International trade relations

We may take as point of departure the fact that the free trade in goods contributes to the attainment of as high a level of welfare as possible in the world. This applies in particular to the trade in industrial products, which —in contrast to agricultural products—is based in principle on a free price-formation and free market relations It is therefore of great importance that the principles and rules of the GATT, which underlie free trade, should also be respected in future. Indeed, this is the principle for abolishing obstacles to trade by negotiations on the basis of most-favoured nation treatment.

The EEC has reacted in a sensible way to the measures taken by President Nixon in August 1971, by not taking any countermeasures which would have made an escalation in the direction of protectionism inevitable. The Community has stood firmly by its policy, which it had already applied in the past, of openness to the outside world as regards industry.

This liberal attitude of the Community presupposes reciprocity, because it cannot be maintained unilaterally in the long run. The future of international trade depends to a large extent on the readiness shown by the major industrial blocks, the US, Europe and Japan, to intensify their relations.

For the time being, a big difference in protection is observable, which is unjustifiable internationally. In the Memorandum on the Industrial Policy of the Community it is stated that the tariff level for industrial products in the US is 80% higher than that of the Community, while that of Japan is 40% higher. The competitive distortions resulting from such a tariff disparity are sometimes made worse by substantial quantitative restrictions, particularly in the case of Japan. On the other hand, the US, more especially, when imports increase, urges exporters to that country to exercise self-restraint. The goal of regulating the market must however be carefully weighed up against the drawbacks such as an exaggerated limitation of the growth of international trade and a shift of trade flows towards more liberal countries.

Another inequality occurs in the case of preferential tariffs for imports from developing countries, which have already been applied by the EEC countries. All industrial countries will need to make a proportional contribution to the

creation of sales possibilities for products originating from developing countries.

Furthermore, a great variety of non-tariff obstacles to international trade are encountered, resulting from national legislations and administrative provisions. The GATT has made an inventory of them, and thus prepared the way for international negotiations.

Meanwhile, negotiations have started between the US and the EEC, inter alia about the changes demanded by the US in the system of regional preferences in favour of countries on the shores of the Mediterranean and about concessions in the agricultural field. In view of the unequal protection, it must be considered of great importance for the Community to arrive at further negotiations about the adjustment of the unequal protection and hence the unequal competitive relations. The Community still by no means acts in accordance with its position as the world's largest trading partner. There is still a lack of unity in foreign economic policy observable among the member states, as also appeared in the case of the arduous negotiations on the monetary and trade policy crisis in the second half of 1971. More initiative and leadership might be expected from the Community in the development of balanced relations in the world.

With respect to a further liberalisation of international trade, it could be objected that this is in opposition to the concern shown by national governments for industry. The two need not be mutually exclusive. For the government, protectionist measures at the border are not an indispensable instrument; they may be replaced by internal measures to promote industrialisation. The latter are even preferable. Indeed, the support character will emerge not only in the implementation of the measures, but also in each case at the time of the budget discussions. The critical examination of whether the government policy is indeed efficient remains a constant concern in the case of internal regulations rather than in the case of trade policy measures.

If distortions of competitions occur in international trade as a consequence of government policy, it is possible to invoke the GATT escape clauses with respect to market distortion, anti-dumping, etc. Whereas in the past these provisions were applied more particularly in respect of imports from state-trading countries or low-wage countries, they will perhaps in future be used more in trade among the industrial countries as well. More consultation among the industrial countries, reinforced by a form of arbitration, is desirable.

3. **Foreign investments**

The responsibility for industrial and establishment policy is primarily regarded as a national matter. It must also be left to each country to choose the

instruments which are best suited to its own circumstances and requirements.

In the EEC it can be seen how difficult it is, even in a limited number of industrial countries, to coordinate the industrial and establishment policy. This coordination may be described as a prerequisite for cooperation in the wider international context.

The time does not therefore yet seem to be ripe for the coordination of the industrial and establishment policy, in the more general sense. This does not exclude the desirability that a number of principles should be recognised internationally which are respected in the national or European policy.

These principles are:

(1) Free access to industrial countries for direct investments, including own establishments and participations.
(2) Non-discriminating according to nationality.

The interests of all parties are served by the application of these principles by the industrial countries. The application may possibly be made to depend on reciprocity.

Re 1. High priority must be given in negotiations between the EEC, US and Japan to the abolition of the obstacles to which are subject exclusively the foreign direct investments in industrial countries.
No common policy has yet been established in the Community. Except where questions of national security are involved, an open policy needs to be applied, which is already put into practice by the majority of the member states. In the US there exist various regulations hindering or restricting foreign investments in certain sectors or states. The anti-trust legislation may also form an obstacle in the case of take-overs of American firms. The criticism does not relate to a general application of the Clayton Act aimed at preventing domination of the market. It is only the lasting uncertainly about the attitude of the American authorities that is open to question. It may thus be wondered whether foreign enterprises may be required to refrain from take-overs, if they can, by means of penetration of their own accord, increase the competition on the American market.
In Japan, foreign establishments are allowed on only a very limited scale, i.e., generally linked to a maximum participation of 25 % in existing firms and of 50 % in the case of new establishments. There is no reason for further postponing a more thorough liberalisation on the basis of what we have proposed with respect to the open subsidiary. If foreign enterprises, in the case of investments in Japan, choose the form of the open subsidiary, then the required cooperation between government and industry will also continue to develop.

Re 2. The principle of non-discrimination based on nationality would in fact need to be developed in greater detail for a number of components of the industrial and establishment policy, e.g., the government's purchase policy, research contracts, aid to enterprises.

The problem of double taxation and of the right to indemnification in the case of expropriation also experiences the aspect of discrimination, if the multinational enterprise were to be taxed more heavily or were to be subordinated to national firms.

It would take us too far to go into all these problems separately here. In general, it may be stated that several bilateral and international agreements have already been concluded and further consultation is in progress on certain sub-sectors. There is not yet any question, however, of general respect for the principle of non-discrimination.

With respect to non-discrimination as well, there is also a task for the Community, so as to ensure that this principle penetrates more generally in international relations in the industrial field.

4. The multinational enterprise as nucleus for international cooperation

Although the chances for satisfactory international arrangements are not great for the time being, there is nevertheless no cause for pessimism. Despite the present upsurge in nationalistic tendencies, the factors are still at work which ensured, in the 1950s and 1960s, that there was an increase in the economic and political interaction among the national economies. The flow of international communication is still increasing exponentially.

The multinational enterprise must play a conscious and active role here. More attention will need to be paid to external relations. This applies to

(a) the national governments, which must be encouraged to strive towards common solutions for their conflicting interests.
(b) other links in society; this notion will have to be contributed for an efficient operation of the multinational enterprise, which is precisely of importance for this society and naturally for the multinational enterprise.

In the first chapter, the multinational enterprise was described as a new form of international cooperation on a group basis. Borne aloft on the wings of a world-conquering technique, the multinational enterprise is perhaps ahead of its time. At the social and cultural level, new patterns for an international society will still have to be created, in which the multinational enterprise must have an appropriate place. The multinational enterprise is a challenge in this respect. It brings together workers and production sources from different countries, acts as a clearing-house for knowledge and experience and contributes to an international dissemination of prosperity. The most important phenomenon, however, is the international confrontation of ideas, the concern for inter-

nationally spread interests and the adoption of a global approach to activities as a point of departure. May we expect that a worldwide philosophy and solidarity will come to exist? This prospect is doubtless present, although a large measure of—necessary—diversity and separate identity will continue to exist.

A pluriform policy, finding expression in open subsidiaries and joint ventures, is therefore an appropriate means of going halfway to meet national aspirations.

ANNEX I

US Direct Investments Abroad by Major Area

in thousand millions of dollars

	1963	1970	% p.y.
All areas	40.7	78.1	9.7
Developed countries	25.6	53.1	11.0
Europe	10.4	24.5	13.0
UK	4.2	8.0	9.0
EEC	4.5	11.7	16.0
Other Western Europe	1.7	4.8	16.0
Canada	13.0	22.8	8.4
Japan	0.5	1.5	17.0
Australia			
New Zealand	1.7	4.3	14.1
South Africa			
Developing countries		21.4	—
Latin America	9.9	14.7	5.8
and Western Hemisphere			

Source: Survey of Current Business, October 1971

ANNEX II

US Direct Investments by Major Industries

in thousand millions of dollars

	1963	1970	% p.y.
Total	40.7	78.1	9.7
Mining and Smelting	3.4	6.1	8.7
Petroleum	13.7	21.8	6.9
Manufacturing	14.9	32.2	11.6
Other Western Industries	8.7	17.9	10.9

Source Survey of Current Business, October 1971

Value of Foreign Direct Investments in the United States by Major Industry and Country—End of 1970

(millions of dollars)

	Total	Manufacturing	Finance and insurance	Petroleum	Other
ll areas	13 209	6 105	2 250	2 981	1 873
nada	3 112	1 831	324	189	768
rope	9 515	4 061	1 800	2 766	888
United Kingdom	4 110	1 391	1 135	1 209	375
Netherlands	2 121	652	58	1 311	100
Switzerland	1 550	1 152	351	—	47
Other	1 734	866	256	246	366
ther areas	582	213	126	26	217

urce: Survey of Current Business, October 1971

THE MULTINATIONAL ENTERPRISE AND THE INTERNATIONALISATION OF THE ECONOMY(*)

M. F. SIMONCINI

Multinational enterprises and economic policy of public authorities

Internationalisation of Western economies has developed in two simultaneous periods: the expansion of international exchanges of trade, services and capital and the progress of large multinational enterprises. Expansion in international trade in recent years has been favoured by the limitation of quantitative restrictions on exchanges, by the lowering of protection tariffs and by the development of monetary relations based on a larger liquidity in the means of international payments.

Multinational enterprises, which consolidated after the Fifties, had already set up branches abroad during the first twenty years of this century: Unilever, Nestlé, Singer, General Electric. Technological development and oligopolistic structures had given a remarkable impulse to the internationalisation of enterprises, on the other hand, speed in communication facilitated the widening of spheres of action of enterprises and a decentralisation of activities and the control of management of independent economic units through a single centre of directives was made possible.

At this stage, it can even happen that cost of expansion in the home market is relevant and that an enterprise finds it more advantageous to build a new market outside the national boundaries, particularly if the rate of increase in the demand is higher elsewhere, thus making for a more flexible market structure

Multinational enterprises in particular constitute the most advanced phase and a strong instrument in the expansion of American capitalism; the impact of American enterprises in Europe is a case in point, for instance, the outlay of fixed investments made in Italy in 1966 represented 6.4 % of the gross make-up fixed capital in the processing sector, 9 % in France, 9.7 % in the German Federal Republic, 13.7 % in the Netherlands and 20.3 % in Belgium-Luxembourg.

An investigation on effects of foreign investments in the Italian economy allows a comparison to be made between the total social capital of firms with a foreign majority participation and that of joint-stock companies in each sector. On this basis, there is an incidence of foreign capital equivalent to 14 %; in processing industries, it reaches 22.5 % and levels higher than 70 % in certain chemical sectors, in electronics, pharmaceuticals and precision tools.

The existence of multinational enterprises clearly requires a new outlook in

(*) Translated from the Italian.

programme, i.e. the adaptation of economic policy decision centres integrated in the present productive structures of Europe.

This, above all, through a want of alternative solutions to industrial structures development of multinational type.

Firms with a State participation, conditioned by bonds of national economic policy, run the risk of being excluded from the multinational strategic process. Because of their public nature, it is difficult for them to integrate in European oligopolistic structures, they can, however, be strengthened through a Community programme.

Not few are the preoccupations concerning the phenomena of economic colonization consequent upon the union of productive sectors with enterprises making their decision abroad. Examples of multinational enterprises with share holders and management represented by several countries are supplied by the banking sector, the main ones are:

(1) Banque Européenne de Crédit à Moyen Terme—the following participate in the capital: Banca Commerciale Italiana, Amsterdam-Rotterdam Bank NV, Creditanstalt-Bankverein, Crédit Lyonnais, Deutsche Bank AG, Midland Bank Ltd., Samuel Montagu & Co. Ltd., Société Générale de Banque;
(2) European Banks International Co.—the following participate in the capital: Amsterdam-Rotterdam Bank NV, Creditanstalt-Bankverein, Deutsche Bank AG, Midland Bank Ltd., Société Générale de Banque, Société Générale;
(3) Société Financière Européenne—the following participate in the capital: Banca Nazionale del Lavoro, Algemene Bank Nederland NV, Bank of America NT & SA, Banque de Bruxelles, Banque Nationale de Paris, Barclays Bank Ltd., Dresdener Bank AG;
(4) British and Continental Banking Co. Ltd.,—the following participate in the capital: Credito Italiano, Hambros Bank Ltd., Union Financière et Minière;
(5) International Commercial Bank Ltd.,—the following participate in the capital: Commerzbank AG, First National Bank of Chicago, Hongkong & Shanghai Banking Corp., Irving Trust Co., National Westminster Bank Ltd.;
(6) London Multinational Bank Ltd.,—the following participate in the capital: Baring Bros. & Co., Chemical Bank, Crédit Suisse, Northern Trust Co. of Chicago;
(7) Manufactures Hanover Ltd.,—the following participate in the capital: Riunione Adriatica di Sicurtà, Manufactures Hanover Trust Co., N. M. Rothschild & Sons;
(8) Midland and International Bank Ltd.,—the following participate in the capital: Commercial Bank of Australia Ltd., Midland Bank Ltd., Standard Bank Ltd., Toronto Dominion Bank;
(9) Orion Bank—the following participate in the capital: Chase Manhattan

Bank NA, National Westminster Bank Ltd., Royal Bank of Canada, Westdeutsche Landesbank Girozentrale, Credito Italiano;

(10) Orion Termbank with the same participations as the last one.

(11) Western American Bank (Europe) Ltd.,—the following participate in the capital: Hambros Bank Ltd, National Bank of Detroit, Security Pacific National Bank, Wells Fargo Bank;

(12) European American Bank & Trust Co.—the following participate in the capital: Amsterdam-Rotterdam Bank NV, Creditanstalt-Bankverein, Deutsche Bank AG, Midland Bank Ltd., Société Générale, Société Générale de Banque.

Other than the previous instance, a few examples of dualnational firms can be mentioned: "Royal Dutch-Shell" formed in 1907, the "Unilever" Group, established in 1930 following the amalgamation between "Lever Brothers Ltd.," and the Dutch "Margarine Unie NV;" "Agfa Gevaert," established in 1964 through the amalgamation on a joint basis between "Agfa AG" of Leverkusen and "Photoproduct Gevaert SA" of Mortesel.

Multinational companies represent a kind of enterprise of transnational dimensions, with a flexible structure linked to associated companies and with productive units established in several countries but which in terms of shareholding composition and decision making or in so far that they have several decentralised structures miss a plurinational qualification. This kind of enterprise is a phenomenon peculiar to the dynamism of the American system. At the beginning of 1970 the book value of USA investments abroad exceeded 70 thousand million dollars, whilst twenty years earlier, it was inferior to 12 thousand million dollars. In the European Economic Community alone, investments supervised from the USA have increased since 1960 more than 12 times. The share in investment expenditure of American enterprises in the make-up of fixed capital of the processing industry has exceeded 20% in Belgium, around 9% in France, over 16% in the Netherlands and it is equal to 6 5% in Italy. It is estimated that in 1975 investments from the USA will reach 25% of the gross make-up of fixed capital in the European processing industry. Furthermore, American enterprises in Europe succeed in drawing on the spot the major portion of the financial resources necessary for their expansion on the continent. In 1967, approximately 84% of such resources were obtained through loans in the European markets or derived from amortisations and reinvested profits. It can, therefore, be said that the USA have transferred to Europe not so much capital as management. On the other hand, the huge North-American companies tend to spread their investments geographically so as to pursue an expansion which otherwise would be prevented by anti-trust laws.

The high cost of USA labour is an opportunity for decentralisation of production to take advantage where cheap labour is available. High cost of production compels a company to implement a more intensive process of plant and structure renewal, it can also lead to the use of obsolete plant and less advanc-

ed techniques in factories abroad where the necessity for a maximum technological development is less pressing.
The concentration process tends to become more pronounced and to reach the firm's optimal size. Beyond a set limit, which is different for each sector, economies in production are not possible; on the other hand economies of the enterprise may increase later at the level of funds for research and development of advanced management techniques. It is sometimes opportune, due to different sets of circumstances, to keep the size of the national plant below the theoretical optimum, moreover, the opportunity may present itself to move abroad whole blocks of production, that is to say, to export an enterprise.

As we have said the relationship between market and firm are altered and this in particular changes the methods of joint-stock companies.

The ambit within which the joint-stock company operates is much wider than that of the small competing firm and must take into account various elements. It follows, therefore, that the methods and the perspectives of the joint-stock company are changed. Thanks to the means of which they dispose, they aim to obtain the maximum profit over a longer period than the small firm of the old competitive market. This leads principally to two attitudes:

(1) One tending to limit the assumption of risks,
(2) the other of mutual respect.

As regards the assumption of risks, large concerns do not indeed seek rapid and casual advantages but aim at the maximum possible profit realisable over a set period of time and they dispose of ample resources.

Concerning the second point, few large joint-stock companies tend to develop group ethics calling for reciprocal solidarity and aid. As a consequence, the behaviour of the joint-stock company has been defined as that of "mutual respect." This has a considerable repercussion over price decisions in an oligopoly. Indeed, according to Sweezy and Baran, the most important aspect of the tacit collusion is known as "Price leadership."

This exists when the market equilibrium price is determined not by the market itself but is imposed by one industry to others (in general this imposition comes from the economically strongest enterprise). Other enterprises accept it, not only because it suits them also, but above all, because if they do not adjust it, this would unleash a battle of prices which would certainly have an unfavourable outcome for all. On the other hand, the case may occur where the price is fixed at a lower level, other companies do not respond and leave their prices unchanged. In this case, which generally occurs only when the companies are of similar size and when they have a reciprocal fear, the pilot company which established the new price level returns to the point of departure.

In consequence, Sweezy and Baran maintain that it is easier for a company to

raise prices, a simple operation with no risks involved, rather than lowering them, since this latter course may cause an imbalance in the market with price war as a result and which would be harmful to all. All this tends towards an increase in price and, therefore, in rate of profit.

Yet Sweezy and Baran's thesis is not based on a complete analysis of the price make-up under an oligopolistic regime. The assumption of "mutual respect" *does not seem sufficient to determine at what level the price is fixed nor its* fluctuations.

There is no doubt that market concentration carries with it a certain degree of collusion between different enterprises but this does not prevent each of these seeking the highest possible profit by exploiting the market situation in the most convenient way.

It is necessary, therefore, to examine more closely what determines the price in an oligopolistic regime and to ascertain if Sweezy and Baran's thesis on the tendency to increase rate of profit caused through industrial concentration, has solid bases.

The determination of price in an oligopolistic regime

There are three types of oligopolies: differentiated, concentrated and mixed.

The differentiated oligopoly is characterized by a subdivision of markets, not a particular single market, but small groups of markets inside which competition is imperfect in that the products offered appear to the consumer to be different from each other.

There is a concentrated oligopoly when there are in the market enterprise which produce uniform goods with such a heavy concentration that a limited number of enterprises are able to control all the production or a major part of it, leaving the rest divided to many small firms. This situation is typical of industries producing implements. On the other hand, industries producing durable consumer goods find themselves in a situation of mixed oligopoly. In this, the main characteristics of the previous markets are to be found: a differentiation of products on the one hand and a concentration of the productive units on the other.

In discussing the make-up of prices, we must bear in mind technological discontinuities caused by the process of concentration itself. Technological progress results in decreasing costs of production provided each enterprise increases output since technological advancement *frequently requires ever larger*, costlier and more productive installations. Alongside large industries with efficient plant, can also exist, however, small or medium industries with less

efficient plant. Taking into account a particular type of enterprise, with a technology which does not allow a production higher than a set limit, and putting marginal costs as constant and corresponding to direct cost, we can deduce that the average unit cost diminishes up to that limit since the fixed cost is divided in an increasing number of units produced. Therefore, if c represents the unit cost, v the variable cost, k the annual fixed cost and x the quantity produced we have:

$$c = v + \frac{k}{x}$$

Moreover, by increasing production, the unit cost gets lower and the direct unit cost remains constant.

We can thus conclude that the larger the enterprise, the more efficient it is since it succeeds in producing at a lower total unit cost. Depending on its size there will be different influences on price decisions. If in the end it is the large enterprises which determine price, even small ones can bring their influence to bear since their number and, therefore, their total production varies according to the level of prices. It is obvious that if they are very small, none can make the price fluctuate to such an extent as to affect the large company but if their number varies, the price will alter despite the small quantity of product offered by each one.

Moreover, the large enterprise succeeds in controlling any eventual attempts by others to enter the market, attracted as they are by earnings of those who are already inside an oligopolistic market. They succeed in controlling such attempts by influencing prices. Whenever it wishes to impede entry by newcomers, the large enterprise avails itself in fact of the lower cost at which it succeeds in producing (for a larger production compared to that of small concerns), it will fix prices so low as to deny the newcomer the minimum rate of profit and it has, therefore, no interest whatever in coming in. This price which prevents entry of new companies is called the "exclusion price".

It should be noted that in order to calculate the benefits of entering a market, the newcomer should take as a basis not the prevailing price (exclusion) but the price which will apply after entry.

Moreover, when they wish to do so, companies already operating succeed in eliminating others in the same market sector by fixing an exclusion price lower than the variable cost to which the company to be eliminated must submit. Thus, the weaker companies not being able to cover even out-of-pocket expenses, are forced to abandon the market.

The determining factors of a price are:

(1) market expansion

(2) demand flexibility
(3) technology
(4) costs of variable factors.

Given a certain market structure and a corresponding price equilibrium if, over a short period, the aim is to maintain the same structure and to change the variable costs of a small number of units, the full cost principle is adopted·

$$v + qv = p \qquad\qquad q = \frac{k'}{x} + \frac{k''}{d} + g$$

If we consider the American economy, and if we accept that wages increase, the margin *q* remains constant as do also the profits.

Over a long period, thanks to new techniques the average unit cost tends to decrease, faster in large enterprises, more slowly in the medium and small ones.

It follows that if all other elements which determine price are considered as constant, the price will tend to find an equilibrium level which allows large enterprises increasing rates of profits, thanks to the larger technological discontinuity which, in our case, is certainly matched by a higher market concentration. If we consider the surplus as being equal to the mass of profits, we have the corroboration of Sweezy and Baran's thesis that the surplus tends to increase.

The "American challenge"

The "American challenge" to Western Europe is enforced mainly through the installation of American firms in strategic sectors of the economy and in those with an advanced technology. At present direct American investments have no *important meaning in the European countries if they are considered in relation* to their whole economy but will be able to assume a key position in coming years to the extent to which American enterprises find financial sources outside the USA; otherwise the deficit in the American enterprises find financial sources outside the USA; otherwise the deficit in the American balance of payments will limit direct investments in Western Europe. At the moment, there is a certain paradox in the relation between such investments and the American balance of payments; during the period 1960-66, the reflux of dollars from the USA for direct investments in Western Europe was 8 150 million dollars, against a revenue from such investments of 4 068 million, resulting in a net outgoing of 4 082 million; during the same period in the case of the under-developed countries there was a reflux of 4 465 million and an entry of 15 051 resulting in a net credit balance of 10 586 million dollars. In a broad sense it could be said that direct American investment in Western Europe is financed by developing countries!

Electronics and aero-space engineering are the sectors in which Western Europe runs the risk of being excluded with rather serious consequences for its prospects of economic development. Servan-Schreiber says "a country acquiring abroad the essential of its electronics equipment will find itself in a condition of inferiority similar to that of nations which a century ago found themselves unable to guide and control mechanisation. Even though they may have had a glorious past, these countries remained a long time on the fringes of civilisation. If Europe's failure in the electronics sector should become established, it would run the risk, through this alone and in the space of a single generation, of no longer being an advanced civilisation area." A large American company has become conscious of the connection between electronics development and economic independence. "In the USA General Motors has refused IBM Computers, as it considers unsafe to reveal their inside information to a company which, as in the case of IBM is on the way to becoming a monopoly."

The thesis on American superiority by Servan-Schreiber which follows seems over-simplified: "numerical strength, raw materials or capital are no longer the signs and instruments of power. Factories are but an exterior relic. Modern power is the ability to invent, i.e. research; it is the ability to make use of inventions in products, that is to say, technology." Mandel refutes this thesis: "The undoubted advantage of large American companies is that, given the larger capital and profits, they could bear the greater risks of the latest technologies . . . this enabled them to buy patents, inventions and technicians when their laboratories were lagging behind. State guarantees of profit to large enterprises engaged in production for rearmament did the rest. Therefore, it is the laws of competition, of accumulation and concentration of capital which explain the supremacy of the large American enterprises and not the "mysterious spiritual strengths." Yet, it is not wrong to talk in terms of the "new gap" as does Klaus-Heinrich Standke but only in the sense that West European capitalism has the technical and intellectual abilities whilst frequently not having the financial means necessary for an accelerated "renewal."

We must point out, however, that in absolute one cannot speak of a real absence of capital in Western Europe; for instance, in Italy during the two year period 1966-67 when there was an insufficiency of investment, private capital to the tune of 1 400 milliard lire was exported. The delay is probably due to an insufficient division of work in Western Europe, this is noticeable even in the Common Market and is the reason why the size of European companies in technologically advanced sectors is still so far behind that of their American counterpart. Yet, the process of division of work in the EEC has already started and is developing along the guide-lines which large West German companies have given to the market for goods which are technologically more advanced; not of little account is a large enterprise of the RFT group Siemens which opposes the predominance of IBM at least in the German Federal Republic; in three years only from 1964 till 1967, the share of Siemens in the computer sector has increased from 5 to 30 %.

Servan-Schreiber, true to his theory of "inventive" USA *superiority proposes* to overcome the disparity between them and Western Europe by altering the American methods "once defined as the leaders of action, once the large operations are chosen, and the connections are established between industrial effort and State aid; it will still be necessary to establish new relations adapted to technological progress, in the complex Industry-University-State . . ., in the first place and a systematic development of client-supplier relationship; it must be accepted that ministries and universities work for laboratories under contract with industrialists and in the sense which they have indicated." This last proposal is really surprising on the part of a man such as Servan-Schreiber who describes himself as being of the Left and who, in order to bring the matter to a close concludes by suggesting a revenue policy chargeable to wages: "Will wage-earners accept the industrial changes? Will they make savings proportionate to the investment needs of our era? Will they agree that their increased earnings come within the bounds of a planning of values? Which rights and authorities will have to be granted to them, which objectives will have to be given to expansion so that they participate in the game and in the interests of production? These are the terms of a debate which would advance economic efficiency and, simultaneously, social justice These are the elements of an extensive negotiation which a Left, true to its programmes, must endeavour to bring to a successful close."

In truth, it is possible to demonstrate the hollowness of the parallel between economic expansion and social justice in the capitalistic system by using the instance of the USA:

Percentage variations

Breakdown of GNP in real terms.	1961/ 1967	Compound Annual Rate	1955/ 1961	Compound Annual Rate
Gross National Product	34.6	5.1	13.5	2.1
Wages	11.8	1.9	8.3	1.3
Companies' Profits	46.0	6.5	16.2	2.5

Already during the period 1956-61, the rate of wage increases was not keeping pace with the expansion of national revenue; during the boom period 1962-67 when national revenue increased by 5 % per annum, the rate in wage increases was very restrained whilst companies' profits almost trebled. Another statistical comparison will help to refute Servan-Schreiber's thesis: between 1957 and 1967 wages in the processing industry registered in real terms an increase of only 16.3 % in the USA against 59.4 % in the United Kingdom, a country considered barely efficient in its economy.

The strategy proposed to the Left by the French journalist of limiting West European industrial concentration and to channel workers claims by means of revenue policy so as to confront from more favourable positions competition with large American companies was refuted; but the strategy of the fight against concentration was also refuted and as Mandel rightly underlines: "from the considerations previously developed, the conclusion should not be drawn that the workers movement of Western Europe has interest in slowing down the process of international capital penetration, because it gradually reduces prospects of conquest through political power at national level, modifying the relations of strength, at least temporarily, to the disadvantage of workers. It would, in any case, be utopian to try to prevent economic changes in line with the development of productive forces even considering that workers movement has never aimed at keeping alive artificially the small capitalistic firm nor to obstruct capital concentration." Against the temptations by the Left to embark in an unprecedented fight against monopolies Joseph Schumpeter in "Capitalism, Socialism and Democracy" (Harper and Brothers, 1947, New York) wrote: "According to the profile of economic development, perfect competition is not only impossible but is theoretically inferior and has no claim whatever to be mentioned as an example of ideal efficiency. It is, therefore, a mistake to base the theory of State control of industry on the principle that the large company must be put to work in the same way as the one in which the corresponding industry would operate under a system of perfect competition. In their criticisms, Socialists should lean on the virtues of a socialist economy rather than on those of the competition system."

Amalgamation trend

We shall examine now activities in amalgamation by sector: real-estate companies represent the most important sector with a somewhat weak capital structure given the instrumental and speculative character taken by such companies in Italy. Numerous amalgamations have occurred in the mechanical industry group; as regards the total number of companies selected for amalgamation we find in first place the metallurgical enterprises followed by electrical industries and chemical companies which represent a relative majority in terms of value. Mechanical industries assume a lesser importance relative to the total nominal capital involved.

A first group of sectors—mechanical, chemical, electric power—has exercised a definite influence on the general progress of amalgamations, both through the number of operations and the importance of the share capital involved. For the mechanical and chemical sectors concentration was particularly heavy from 1962 onwards with a more intensive amalgamation movement during the recession period, later stimulated by law 170.

A second group—agricultural firms, cement plant, extraction, paper, building

construction—show evolution tendencies linked with the economic movement, where concentration and rationalisation remained about constant during the whole period but with more activity in recent years.

In a third group, the amalgamation movement occurred after some delay. The number of operations is somewhat reduced and dispersed over the whole period of time considered without any particular concentration. In these sectors it is only in more recent years that a movement of concentration and rationalisation can be seen: from 1961 for metallurgy, from 1964 for paper and its technique, from 1965 for food firms, cotton firms, graphic arts, from 1966 for wood and furniture.

The mechanical sector

In a first overall appraisal it is opportune to note that the mechanical sector is characterized by a low rate of activity by the enterprises; those which have amalgamated in general are of medium and small size in comparison to the importance of the sector (even if they are included amongst the largest companies of the two hundred). Moreover, in practically all cases they have absorbed only one company during the period.

In the electromechanical sector on the other hand, rather high activity in amalgamation is to be seen, those involved were medium to large firms. It seems moreover that two operations were purely of rationalisation: those of Marelli and Ignis.

In the sector of construction of means of transport are seen operations, probably of "internal" rationalisation, by FIAT during 1967 and only relatively large enterprises have incorporated other companies.

In the metallurgical sector one is struck by operations of the largest enterprise in the sector, i.e. Italsider which extends over the whole period under examination.

Medium size companies were more active and operations were carried out essentially during more recent years, this influence was due partly to the decision to nationalise the electrical sector, given the connections existing between energy and the electro-mechanical companies.

In the shipyard sector amalgamations were few in technical and economical terms and were carried out by relatively small enterprises.

Metallurgy

In the sector of the metallurgic industry are 19 of the 200 largest companies

:lected on the basis of their sale value during 1963. This sector seems naracterized by a high number of operations during the period 1957-1968 that 23 were recorded in all.

mongst the enterprises mainly involved in increasing their own size through sternal expansion, i.e. by absorbing other companies, are in the first places:

alsider (2nd, 1st in the sector), concluded 12 operations incorporating in 961 Cornigliano, nominal capital 70 thousand million; in 1964 Generale ugliese di Elettricità, nominal capital 9.3 thousand million; Elettricità della ampania, nominal capital 1.7 thousand million; Unione Esercizi Elettrici, ominal capital 33.8 thousand million; in 1966, Acquedotti della Versilia, ominal capital 20 million; Immobiliare Borgo, nominal capital 1 million; errovie Marchigiane, nominal capital 1 million; Siderurgica dell'Ossola, ominal capital 842 million; Sigim Italiana Gestioni Immobiliari, nominal ipital 50 million; in 1967, Meridionale Azoto, nominal capital 7.7 million.

ava Soc. Alluminio Veneto (138th, 18th in the Sector) concluded 4 amalgaiations, incorporating in 1965, Idroelettrica Cismon, nominal capital 1 thouind million; in 1965 Ftalital, nominal capital 1.5 million; Laminal, nominal ipital 1 million; in 1965, Smirrel Serbatoi Montani Irrigazioni Elettricità, ominal capital 500 million.

cciaierie e Ferriere Lombarde Falck (15th, 4th in the sector) concluded 2 perations incorporating in 1963 Nazionale Elettrometallurgica Sondel di Roma, ominal capital 600 million; in 1966, Nazionale Elettrometallurgica, nominal ipital 400 million.

fetallurgica Italiana (60th, 7th in the sector) concluded 2 operations inorporating in 1958 Metallurgica Bresciana, formerly Tempini, nominal capital .5 thousand million; in 1964 Forze Idrauliche Appenino Centrale, nominal ipital 3 thousand million.

edaelli Giuseppe & Fratello (108th, 12th in the sector) concluded 2 operaons in 1967 Trafilerie Corderie Italiana, nominal capital 700 million, laterferri, nominal capital 100 million.

abbrica Italiana Tubi (124th, 16th in the sector) concluded 1 operation inorporating in 1967 Ferrotubi, nominal capital 1.1 million.

ı this sector, a total of 23 amalgamations took place; 23 companies were osorbed.

Mechanical industry

In this sector are 19 of the 200 largest companies selected on the basis of their sale value during 1963. This sector seems characterized for the period 1957-1968 by 11 amalgamations. Amongst the enterprises more actively engaged in increasing their size through external expansion, i.e. by absorbing other concerns, are in the first places:

RIV-SKF Officine di Villar Perosa (25th, 2nd in the sector) which concluded 3 operations, incorporating in 1966 Macchi Cuscinetti, nominal capital 250 million; Costruzioni Druento, nominal capital 400 million; in 1967, Immobiliare Sitor, nominal capital 1.5 million.

Aspera Frigo (88th, 10th in the sector) which concluded 2 operations, in 1959 Aspera Frigo of Turin, nominal capital 140 million; in 1968 Fonderia Aspera, nominal capital 1 million.

Singer Compagnia Macchine per Cucire (49th, 5th in the sector) which concluded 1 operation incorporating in 1967 FIAR, nominal capital 0.5 million.

Nebiolo (132nd, 12th in this sector) which concluded 1 operation incorporating in 1962 Colture Razionali, nominal capital 25 million.

Tosi Franco (82nd, 9th in the sector) which concluded 1 operation incorporating in 1966 Immobiliare Boccaccio, nominal capital 100 million.

Ideal Standard (79th, 8th in the sector) which concluded 1 operation incorporating in 1966 Ideal Standard Industrial, nominal capital 50 million.

F.lli Borletti (109th, 11th in the sector) which concluded 1 operation incorporating in 1966 Filatura S. Giorgio, nominal capital 30.4 million.

Morteo (19th, 18th in the sector) which concluded 1 operation incorporating in 1967 Prefabbricati Finsider, nominal capital 300 million.

In this sector a total of 11 amalgamations were concluded; in total, 11 companies were absorbed.

Electro mechanical industry

In this sector are 16 of the 200 largest companies selected on the basis of their sale value during 1963. This sector is characterized by a number of amalgamations during the period 1957-1968 with a total of 24 amalgamations recorded and with the take-over of 31 companies. Amongst the firms more active in increasing their own size through external expansion, i.e. by absorbing others are in the first places.

Ignis (64th, 8th in the sector) which concluded 7 operations incorporating in 1966 EL.VA, nominal capital 450 million; Metallurgica [illegible] [illegible]

capital 450 million, FIL, nominal capital 50 million; Isover, nominal capital 100 million; Conis, nominal capital 150 million; in 1967, in one single operation, Imball, nominal capital 60 million and Orleandro, nominal capital 9 million; in 1968, Fonter, nominal capital 150 million.

CGE (45th, 4th in the sector) which concluded 7 operations, incorporating in 1957 Antonio Biffi of Milan, nominal capital 29.9 million; in 1962, Compagnia Generale Componenti, nominal capital 1 million; in 1966, Unda Radio, nominal capital 6 million; Zancangeloni, nominal capital 3 million; Compagnia Italiana Apparecchi Elettrici CONE, nominal capital 228 million; SIRE, nominal capitai 150 million; Scotti Brioschi & Co., nominal capital 240 million.

Officine Galileo (134th, 13th of the sector) concluded 3 operations, in 1962, Applicazioni Industriali di Firenze, nominal capital 1 million; in 1963, Officine Galileo di Milano, nominal capital 20 million; in 1967, Costruzioni Ottiche e Meccaniche, with a capital of 50 million.

Siemens (51st, 6th of the sector) concluded 2 operations incorporating in 1963, Immobiliare Agricola Castelletto, nominal capital 10 million; in 1964, Aziende Tecniche Elettroniche Sud, nominal capital 1.5 thousand million.

Ansaldo S. Giorgio (54th, 7th of the sector) concluded 1 operation incorporating in 1966 Officine Elettromeccaniche Triestine, nominal capital 1 thousand million.

Fabbrica Italiana Magneti Marelli (40th, 3rd of the sector) concluded 1 operation incorporating in 1968 in a single operation, Francesco Rabotti, nominal capital 700 million; Rabbotti Sud, nominal capital 200 million; Imcarario, nominal capital 150 million; Fabbrica Italiana Valvole Radio Elettriche (FIVRE) nominal capital 2 thousand million; Mabo, nominal capital 7 million; Radio Marelli, nominal capital 1.2 million; Iniex, nominal capital 20 million; Magneti Marelli took over a total of 7 companies.

Magrini (148th, 14th of the sector) concluded 1 operation incorporating in 1965 Officine Elettriche Scarpa & Magnano, nominal capital 1 thousand million.

Geloso (196th, 18th of the sector) concluded 1 operation incorporating in 1962 Immobiliare Calzaturificio Brenta, nominal capital 1 million.

Philips (23rd, 1st of the sector) concluded 1 operation incorporating in 1966 Isonzo, nominal capital 100 million.

Construction of means of transport

In this sector are 11 of the largest companies selected on the basis of their sale

value during 1963. During the period 1957-1968, four amalgamations took place in this sector. Amongst the firms more active in increasing their own size through external expansion, i.e. absorbing others, is, in first place:

Fiat (1st, 1st of the sector) which concluded 2 operations incorporating in 1967 in a single operation, Gomma Ebanite Similari, nominal capital 150 million; NAC Italiana, nominal capital 100 million; Officine Costruzioni Industriali, nominal capital 3 million; Costruzioni Aeronautiche Novaresi, nominal capital 100 million; OM, nominal capital 20 million; and Auto Bianchi, nominal capital 6.5 million, in a single operation Fiat has absorbed a total of 6 companies.

Policy of Fiat

Due to a narrower internal market, Fiat seeks constant outlets abroad; the largest share in motor vehicles exported compared to total production was reached during the period between the two World Wars and has never been exceeded since; in 1927, to be exact, when the 30 000 motor vehicles exported represented $^{2}/_{3}$ of production. It is during the inter-war years that Fiat developed its commercial network and created its branches abroad (sales, servicing, assembly). After the War—thanks to the introduction of new models, to the government's policy which facilitated expansion, to the need of covering an increasing internal market—exports, whilst continuously on the increase, represented up to a few years ago a not negligible but neither high share of production. Yet in 1970 Fiat, OM and Autobianchi vehicles reached an export of 617 720 units, equal to about 39 % of Italian production. In total, exports by Fiat represent about 10 % of the world export of motor vehicles.

Some markets are of particular importance for the Fiat group. 53 % of exports go to countries of the EEC and 18 % to those of the EFTA. As for Socialist countries whose importance is limited but increasing, about 80 % of exports go to European markets. About 9 % is taken by the USA and Canada, whilst the rest is distributed in other countries. The importance of the European market is such (and it is obviously greater when considering also the Italian one) that in the recent publicity campaign in the USA, Fiat shows itself as the company with the largest share of the European market.

During the sixties, in effect, Fiat group is the one which has increased the most its sales in Europe (as shown by Table 1 prepared by Soris on data of companies' balance sheets) and its share is even higher when considering also Citroën.

The international market of Fiat

Exports of finished vehicles, i.e. completely assembled, is but a part of the role which the international market offers to Fiat. Like the other large makers of

cars, Fiat on its own and in conjunction with other companies has for some time created enterprises either for the assembly or for complete production of motor vehicles and tractors. According to the latest report to shareholders, production "by establishments operating abroad... has... totalled about 450 000 cars and industrial vehicles also about 30 000 tractors; these totals do not include production by Citroën nor by Volga, nor units assembled abroad with parts supplied by us".

1962		1968		
Vehicles (thousands)	Market Share	Vehicles (thousands)	Market Share	Company
595	19.4%	1.100	24.7%	Fiat + Autobianchi
499	16.4%	538	12.1%	Volkswagen + Auto Union
337	11.1%	491	11.0%	Renault
267	8.8%	437	9.8%	General Motors
281	9.2%	324	7.3%	Ford
276	9.0%	317	7.1%	Citroën
58	1.8%	82	1.7%	Alfa Romeo

"Official" investments abroad represent about 33 % of Fiat's shares portfolio, with a slight decrease in absolute value compared with 1969 and with a percentage reduction more pronounced. Over 98 % of such investments are held by Holding Fiat with an office in Lugano. It should be added that IFI has an international holding in Luxembourg and numerous participations are almost certainly lead by IFI or companies under its control. According to certain sources, establishments abroad which produce or assemble Fiat motor vehicles, tractors, rolling stock, large engines, etc. exceed thirty. An exact list of the countries where Fiat is present is extremely difficult; the sources, even agencies, give different and uncertain information, above all where assembly plant is concerned. In any case, that the international development of Fiat has been intensified during the post-War era and above all in more recent years is clear. Should we suggest a period when a turning point was reached, we would choose 1965, not only because the agreement with the Soviet Union (which will have considerable importance for the multinational future of Fiat) was settled that year, but also because activities abroad managed, controlled and financed directly by Fiat acquired a greater importance in the group's policy.

The logic of international development followed by Fiat is due to customs' barriers which preclude the export of complete vehicles or because a prominent share of the market has been secured and it becomes convenient to produce or assemble locally. As a rule assembly precedes complete production even after many years—even when the establishment is capable of producing complete vehicles—numerous establishments help in production itself with

alongside an assembly chain which receives parts from Turin or from other establishments. On the other hand, to start with assembly invariably shows itself more convenient for several reasons. It is not possible to be present in markets which are barely developed, to benefit from low labour costs whilst transport costs (thanks to the development of containers) are in constant regression. Alongside the production or assembly plants which are dependant on Fiat's finance programme there is a spread of production under licence. Examples of these are the plant of Togliattigrad, FSO in Poland, NASR in Egypt, etc.

In view of the importance which the European market offers to Fiat, it is obvious that the company should be directly present in almost all these countries. In France, the activities of Fiat depend on Fiat France with a share capital in excess of 140 million French Francs controlled as to 48.5 % by Fiat and 9.5 % by the Luxembourg holding of IFI and in whom Chrysler has a participation of 24 %. Fiat France which employs about 8 500 workers relies on sales, servicing of motor vehicles and the production of Unic coaches and Someca tractors.

In 1969, 6 827 lorries and 14 000 tractors were produced; in 1970, there was an increase in production of industrial motor vehicles (over 8 000) whilst production of tractors showed a small reduction.

In West Germany, Deutsche Fiat has been established since 1922 (35 million marks), it has a 100 % control over seven companies. The most important are Neckar which assembles a number of Fiat cars, Fiat Traktoren which produces and assembles tractors and earthmoving equipment and Fiat Leasing. Commercial and servicing activities are of course also entrusted to Deutsche Fiat

The country in which Fiat's presence is most important is Spain where Seat is controlled as to 51% by the Spanish fascist State through the National Institute for Industry and where Fiat's participation is 36 %. But to this share must be added another 12 % recently acquired by IFI. Seat which in 1970 produced about 285 000 motor vehicles (28 % higher than the previous year) is the largest Spanish motor car company and its production represents about 60 % of national production. It employs 25 000 workers and has represented for Fiat a useful instrument to obviate the production strangulation in Italian plants. For a considerable time, in fact, Seat presses have worked for Turin On the, other hand, Seat does not limit itself to the production of complete cars, it also assembles Fiat cars with parts produced in Turin. In 1969, apart from the normal Seat production, 120 000 motor vehicles were assembled using parts from the Italian Fiat works.

In Yugoslavia Fiat is present through Crvena Zastava where it holds a 49 % participation. 19 000 workers are employed by Zastava and production in 1969 was 71 000 motor vehicles. Forecasts indicate an important increase in

production (183 000 by 1973); this plant also assembles parts of Fiat cars from Turin alongside its own production; it can even be said that up to the present, assembly has been prevalent. Production of Zastava, including assembly, is 50 % of the Yugoslav total. Joint Fiat and Zastava activities are foreseen in Colombia and in India (the latter should produce utility vehicles to the tune of 50 000 units per annum). Technically and from every point of view, control by Fiat is practically complete.

Other assembly plants exist in Portugal (7 000 vehicles in 1969), in Austria, in Ireland, in Belgium and in the Netherlands. Bulgaria and Rumania assemble tractor parts under licence and with Fiat parts. The plant of Togliattigrad, on the other hand is selfsupporting.

The presence of Fiat in South America is huge. In Argentina, there is Fiat Concord, Materfer and Grandi Motori. Fiat Concord which is the largest Argentinian private company employs 13 000 workers and has produced in 1970, 50 000 motor vehicles, 5 600 tractors and about 3 000 lorries. Its sales value has been of 143 thousand million lire. Other assembly plants are located in Chile, Mexico, Peru, Venezuela, Paraguay and Costa Rica. In Uruguay, the Automotora Basso plant assembles Fiat components. It is estimated that no less than 70 000 motor vehicles were assembled in 1969 in the Latin American plants (apart from the independent production by Fiat Concord). A project is nearing completion for the manufacture of tractors in Brazil.

In Africa, there are works which assemble Fiat motor vehicles in Egypt, in Morocco (Somaca where Fiat France has a participation of 25 % and the public concern Bepi of 50 %), in Kenya and in Tunisia. As can be seen, apart from companies where Fiat's capital is present, there are others which are financially independent of Fiat, but assembled under Fiat licence and with parts from Italy (ex. Egypt, Tunisia).

Apart from the companies already spoken of, mention must be made of Marocaine de construction automobiles (100 % Fiat, Fiat Zambia (car assembly, 100 % Fiat, Fiat South Africa) (assembly of about 10 000 in 1969), all controlled by International Holding Fiat of Lugano. Other assembly plants are foreseen in Ethiopia, Zaire and the Sudan.

In Asia, countries where there are plants which produce and assemble Fiat motor vehicles are many. In Turkey, the presence of Fiat is very strong: Tofas (2 000 employed) in which Fiat's participation is of 41.5 % and Turk Traktor controlled by Fiat. There are other plants in Iran, Korea, Malaysia, Pakistan, Thailand and in India where "Premier Automobiles with a capital of 74.8 million Rupees operates and employs 10 000 workers." There are other assembly plants in Australia and New Zealand. In Japan, Kubota produces tractors under Fiat licence.

As can be seen, the establishments which produce or assemble Fiat vehicles are extremely numerous. Fiat is strengthening further its foreign set-up. For example, Seat should reach a production of 480 000 motor vehicles in 1972, Tofas should produce 20 000 also in 1972, Premier 25 000, etc. Within a few years, therefore, production of 700 000 motor vehicles (excluding those assembled) should be reached. It can also be presumed that the volume of motor vehicles assembled will increase sharply and our estimate (over 300 000) should be exceeded quite soon.

Lastly, foreign activities by Fiat do not appear in their true importance if the field of construction is left out: ahead of the Fiat group is Impresit, the largest Italian civil engineering company. It is to Impresit that was entrusted the construction of the Kariba Dam and, more recently, in association with companies from other countries, the work on the Tarbela Dam. In collaboration with others or alone, Impresit (created in 1929 by a group of financial institutions and taken over later by Fiat) has worked in Africa, in Latin America, in Asia, etc. The value of contracts for 1970 was about 450 thousand million lire and apart from the 2 500 Italian technicians and workers there are tens of thousands of local workers on the sites. Impresit and other companies or groups with which it operates is an example of the kind of expansion seen in Italy during the early post-War years; a functional expansion which requires more promising investments than those of Fiat in its assembly or construction plants.

Fiat's position in the international market

Fiat participates in the international division of work not only passively by accepting a set scheme but also actively by promoting and participating in agreements which on the one hand exclude our country from a given activity and, on the other, strengthen Fiat's position in the international market for the motor vehicle sector.

The recent agreement with J. Deere confirms that Fiat tends to specialise in the motor vehicle and utility vehicle sector whilst keeping a controlling position in its other activities.

The Fiat-Citroën agreement shows that this Italian company with increasing interests and participation abroad has become a real and true multinational company but may reveal characteristics which are different from those of multinational companies existing hitherto.

In December 1970 after lengthy negotiations and after Fiat had already secured a participation in Citroën, Paredi (Société de participation et de développement) was established; it owns 53% of the share capital of Citroën. In its turn, the capital of Paredi is divided between Fiat and Michelin, in the proportion of 49 and 51% respectively. Citroën, on the other hand, [illegible]

Berliet (the French manufacturers who cover 45.6% of French production of industrial vehicles of over six tons). In 1969, Citroën-Berliet's production was worth 868 thousand million lire. 505 997 motor vehicles were produced and 20 085 coaches. In 1970, production increased sharply (by over 25%). Even without precise information, all agree that Fiat-Citroën have overtaken Chrysler, taking third place after General Motors and Ford. Fiat is able to be present in the European market even in those engine capacities from which it had been excluded since the French firm occupies an important position in capacities exceeding 1 700 cc. The agreement will not consist of a simple overlapping of various establishments and products. The mutual integration will also cover the commercial network, moreover, projects are being considered for standardising parts of Fiat, Citroën and Lancia vehicles to obtain a greater importance and economies and at the same time to dispose of different plants which at the opportune moment can produce irrespectively for one make or the other.

The Fiat-Citroën group has thus become the most important European motor vehicle manufacturer and has better prospects than the German Volkswagen-NSU-Autounion group for developing and introducing new models in the market; this commercial policy of diversification of products also opens the prospects of reaching different income groups.

A possible agreement between Fiat-Citroën and Volkswagen has been mentioned; this would confirm the forecast that the Common Market, after a period of sharp competition, may have led to a higher degree of monopoly, to a larger concentration and to more agreements.

The agreements Fiat-Citroën, Agfa-Gevaert, Pirelli-Dunlop are the signs of the beginning of a new phase: the truly multinational companies, European companies will be able to build, in conjunction with other factors such as monetary and economic policies, not only a common market but also a common economic system.

At the summit of Fiat's international policy there is a twofold requirement: build a multinational company able to contain competition which will become increasingly sharper through a slackening in the rate of increase in sales of cars in Europe and dispose of plants so sited geographically as to benefit from the differences in syndical revendication and their lack of cohesion. The Chairman of Fiat, Gianni Agnelli has said that the multinational company is "the most effective instrument to operate in tomorrow's world," his strategy cannot be understood if this reality is omitted.

The ability of self-financing, the possibility of drawing capital and to make it flow from one country to another according to the need of new activities, etc. show how Fiat can succeed, at least on a medium term. The risk is that this will be a Fiat success and not a success of the Italian economic system which

runs the danger of being temporarily more integrated in the traditional system *(with the rules of division of work) and placed more on the fringe because* its own major company will become always less Italian and more international.

RIV-SKF

This multinational group faces the challenge of world wide pressure with 65 establishments, 28 plants, 52 sales organizations in all continents. In over 60 years of operation, the group has produced up to now about 6 thousand million bearings. SKF was founded in Goteborg by Dr. Sven Wingquist in 1907, already in 1909 and 1910, it opened branches the other side of the Atlantic and in Great Britain; in 1914, the first German factory was built and in 1917, the first French one. Meantime, it bought two important Swedish steel-works. In 1947, there were 45 SKF plants in operation The amalgamation with RIV came in 1965. Today, the SKF group employs 64 000 ans its annual sales are around 450 thousand million lire.

RIV was founded only one year before SKF; it was established in Turin in 1906 by Sen. Giovanni Agnelli with a first pilot plant of 23 operatives. A few months later, the Villar Perosa plant was built, with 180 operatives, 300 machines and its own hydro-electric plant, its production capacity was 20 000 bearings per anuum. In 1911, it reached a target of 220 000 bearings per annum. At the end of the First World War, RIV employed 1 000 and it covered an area of 28 000 m^2. A new plant was built in Turin in 1924. In 1932, there were 4 400 workers and the area had reached 70 000 m^2, new works were opened at Massa in 1939; workers had increased to 8 600 whilst the area extended over 155 000 m^2 and annual production exceeded 20 million bearings.

The expansion process of RIV went on: in 1956, the Cassino plant was built, the first activity of its kind in the Italian Mezzogiorno, three years later a new plant was built at Pinerolo. The nucleus of the Airasca establishment was inaugurated in 1963. In 1965, the company joined the SKF multinational group under the RIV-SKF Officine di Villar Perosa S.p.A., it employs at present about 10 000; over 100 million bearings per annum are produced in 8 plants and it has 16 branches in Italy apart from about one thousand distributors. The production programme of RIV-SKF includes every type of bearing which means several thousand different types of shapes and sizes.

Apart from having a leading position amongst the world specialists for supplies to the motor industry, RIV-SKF make bearings for advanced technologies as for instance aero engines and machine-tools which require parts with a very high precision. RIV-SKF as a company in the SKF international group is in a position to satisfy any demand for bearings, from those with a 1 mm. diameter and weighing less than one-tenth of a gram, to those with an outside diameter of several meters; from bearings which can turn at 400 000 r.p.m. to

others which can carry loads heavier than 2 000 tons. The heavie
produced till now by the SKF group weighs 6 100 kilo, the ligh
gram.

Special steel for bearings, one of the bases of success of the SKF
rives at the RIV-SKF works as a tube or a bar for small and med
rings, billets for large rings and drawn wire for the revolving piec
year, some 80 000 tons of steel are processed. With its own production
ed in that of the group, RIV-SKF guarantees original bearings where
are machines and equipment built in Italy; stocks of spare bearings
assured for any machine built in any other country of the world.
bearing goes through several basic stages of manufacture: twining or
of the rings, heat treatment, grinding to give rings the size and finish
mounting of the revolving parts and cages in the rings. Balls and
through similar stages. Cages are mostly stamped or turned. The raw
mainly used is the tube from which the rings are made on auto
spindle lathes. From the lathes, the rings are tested. In some cases, d
first operation of rough-shaping on an automatic lathe, there follows
ing process on special single-spindled lathes. For rings of larger sizes,
operation consists of forging with a hammer or of stamping or rolling
passed the test after turning, rings go through a heat treatment. This
several stages and its purpose is to impart to the various pieces whi
up the bearing the prescribed hardness; special appliances measure th
end of the process. Laboratory checks examine the steel's internal s
Hardened rings are then ground and the surplus metal left during is
from their surface. They thus reach their final shape and size. The
particular, i.e. the groove in which the balls or rollers are made to
specially finished; from this delicate operation depends largely the s
the bearing in action.

Two million balls and three million rollers are produced daily at the R
plant of Pinerolo. The ball is made by stamping a steel drawn wi
rougher uneveness is removed by a filing machine after which the
hardened through a complicated heat treatment. It finally passes
several stages of grinding and "shining". After each operation, strict t
carried out on every single ball to ensure the highest level of quality.

ne task of the cage is to keep moving parts at their proper distanc
be turned, pressed or stamped, in one or sometimes in two pieces
semi-cage". They are produced in a special shop of the Airasca plant
the other RIV-SKF plants at the daily rate of about one million pieces.

Bearings are assembled automatically; the machine, working on ring size,
suitable balls and places the cage in the required position. A medium
revolving bearing goes through a total of at least 40 different processi
checking operations.

RIV-SKF use electronic computers for solving problems of actual projects. To users of its products it offers programmes of calculations of physical dimensions for their planning, making, with the extreme rapidity typical of electronic systems, calculations which through their complexity would have represented an obstacle not easily surmountable through traditional methods of industrial practice.

RIV-SKF does not manufacture only bearings. Quite apart from present studies about the numerous items which can represent a promising diversification, RIV-SKF have for some time been specialising in the production of shock-absorbers of different types, also tappets for car engines. Research is very intensive, not only in order to maintain the pre-eminence which the SKF group holds in the world and which RIV-SKF has in Italy, but also in the study, development and implementation of the most advanced technology. This takes a practical form in the research laboratory which is the pride of the company and works in coordination with the laboratories of other firms in the group, at the SKF European Research Centre.

Honeywell Incorporated and Honeywell Information Systems

One of the first steps taken by General Electric, the world's largest electric and electronic group, when it held 66% of the French Machine Bull's shares, was the dismissal of 500 workers. At a later stage, dismissals reached 3 000 with a further 2 000 being to accept "voluntary dismissal".

This resulted in the closing down of five factories whilst various research and development groups were abolished.

In May 1970, GE announced that it was ceding to Honeywell its controll of Bull. Workers of the two companies learnt this through the Press. This lateral change of control, i.e. from one foreign company to another foreign one, was decided thousands of kilometers apart. The French Government "consulted" in the matter, gave its consent in July. Honeywell undertook to maintain the same employment levels at Bull's.

In August 1970, the world President of Honeywell, James H. Binger, declared that the agreements with the Computers Division of GE would have meant an expansion in production and employment. A telegramme and a Press communiqué from the USA announced the dismissal of 260 out of 360 workers of the Amsterdam branch. Once again, the decision had been taken thousands of kilometers away.

The Dutch syndicate for metal workers had obtained during the negotiations of January-February 1971 a project of active assistance for the workers concerned.

Meantime, transfers of other workers of this plant to others in the Netherlands, France and Germany were spoken of. Simultaneously, it was said that several hundred other workers ere to lose their jobs: 500 at Great Britain (400 in Lankarsire and 100 in the new plant of Hemel Hempstead), also 3 000 in the USA (not all from the computers division). The factory councils in Germany protested so loudly that the firm was compelled to reduce the 100 dismissals anticipated but it did not renew the contracts of 50 foreign workers (frequently subjected to his kind of treatment) and losses through death or retirement were not made up.

General Description

Honeywell was founded in 1927 through the amalgamation of "Honeywell Heating Specialists" and "Minneapolis Heat Regulator". It adopted its present style in 1964 after having been known as "Minneapolis Honeywell Regulator".

Honeywell is the largest group producing industrial instruments and electric, electronic and pneumatic control systems specialised in the thermal sector; fans and air conditioning plant, and, in the industry of space exploration.

It is equally active in production of war material with fragmentation bombs. This has caused demonstrations in large sectors of public opinion where it is known as "Honeywell Project". In 1970, a demonstration compelled the Chairman to bring to a close a meeting of shareholders in Minneapolis after a session which lasted 10 minutes—a record! There were other protests in the American plants, in those of Great Britain and in Germany.

The company also specialises in the manufacture of electronic equipment and the various instruments connected with it, in 1969 it took over Computer Control Company. Honeywell is made up of six divisions of which the Computer and Communications division was established in conjunction with that of GE to make the present Honeywell Information Systems (receipts in 1969 represented 24% for the whole group). The other divisions are: Controls (23% of receipts), Space research (34%), Industrial products (17%), Research Centre and production of optical instruments (2%).

GE-Honeywell

The outstanding feature of 1970 in the computer sector was the amalgamation of GE and Honeywell. The new company took the style of Honeywell Information Systems (HIS). Honeywell Inc. holds 81.5% of the shares, GE 18.5%.

GE transferred to the new company two plants in the USA for the production of computers, the control of Bull-GE in France and of GE Information Systems (previously Olivetti GE in Italy). GE contributed almost 10% in total to Honeywell, over and above a total value of $ 110 million in bonds. Honeywell transferred to the new HIS group six plants in the USA and others in Scotland, England, Canada, Germany and Japan.

It is superfluous to mention that in the competition race in the computers sector, it has to face up to IBM which holds about two-thirds of the world market. Honeywell and GE are now in second place, having overtaken Sperry Rand Univac which holds 5.6 %. But much remains to be done.

Honeywell employees

Early in 1970, GE employed 400 000 and Honeywell Inc. 81 500 of which 23 000 were working outside the USA. In September, 1970, the new company Honeywell Information System absorbed about 23 000 of GE employees and about 28 000 from Honeywell Inc., making a total of about 51 000 (including 16 400 from Honey-well-Bull). The dismissals early in 1971 reduced these figures to about 48 000 employees.

The activities and employees of Honeywell Information Systems (based on figures for the end of 1970) were:

USA	11 000 (plants only)
France	10 000 (about 5 000 in Paris, 2 400 in Angers and 2 350 in Belfort)
Great Britain	3 900 (including commercial outlets in Australia and South Africa)
Canada	900
Germany	400 (plant of Heppenheim only)
Netherlands	600 (360 in the Amsterdam plant)
Italy	3 300 (1 230 in the Caluso plant).

The other 20 000 work in administration and commercial centres in the departments of Honeywell Information Systems in the USA and in:

Europe	(Austria, Belgium, Denmark, Finland, Greece, Norway, Portugal, Spain, Sweden and Switzerland)
Latin America	(Argentina, Brazil, Mexico—including a small plant in Mexico City—Uruguay and Venezuela)
Asia	(Japan and The Lebanon)
Africa	(Algeria, Ivory Coast, Madagascar, Morocco, Reunion).

In many countries the activities of Honeywell Inc. are, of course, considerably more important than the figures of HIS; for instance in Great Britain, the plants making industrial instruments, heat control equipment and other items for computers has a total of around 9 000 employees. Similarly, in Germany, the total of the personnel employed by Honeywell Inc. and Honeywell Information Systems (HIS) was brought into focus when the Chairman of His, Clarence W. Spangle, was also elected Executive Vice-President of Honeywell Inc. early in 1971.

The future for Honeywell employees

Honeywell's future—and particularly that of HIS and of its European key

company, Honeywell-Bull—causes a great deal of concerns to its employees and their syndicate. Rumour of participations, amalgamations or take-overs (on the part of the British ICL, the French CII and even, incredibly, of General Electric) show the need of employment guarantees at all levels of the multinational activities. Honeywell's continuation in its present shape in no way reduces the necessity for securing such guarantees.

Financial Outlook

Spangle, the spokesman of HIS, stated in February 1971 that income for 1970 amounted to 861 thousand million dollars, an increase of 13 % compared with 1969 for the Computers Division of Honeywell and GE. Honeywell Inc. succeeded only in maintaining the same level of income as the previous year, keeping to the figures published (this, despite the fact that income during the first six months of 1970, 29 million dollars, exceeded by 11% the 26 million recorded during the same period of 1969).

	1970	1969
Income	1.921 million dollars	1.838 million dollars
Profits	62 million dollars	62 million dollars

N.B.:
[1] Figures for 1969 were amended (as concerns income of 1426 million dollars) to include results of G.E. computers and to bring them into line with the data for 1970.
[2] These consolidated figures include for the first time in 1969 and 1970, those of YAMATAKE HONEYWELL with a share participation of 50% in Japan, which in both years had an income of 1.2 million dollars.

The Chairman of Moneywell Inc., James H. Binger, whilst releasing this information declared on 19th February, as reported in the Press, that the outlook for 1971 was "rather complex."

It is interesting to note that after a long period of sickness Bull-General Electric, shortly before announcing the transfer to Honeywell, published the first financial report which showed it as being for years a solid and prosperous industry. After accumulating total liabilities of about 500 million French Francs (equal to about 55 thousand million lire) in connection with previous years, Bull-GE wrote for 1969, 139 million Francs to financial reserve and depreciation, 3.56 million Francs to net profits and an increase of 40 % in the order book.

Announcing the development of HIS (which is faster than that of Honeywell Inc.), Clarence Spangle sees better prospects for the future, a development rate of 14-15 % in the USA and 20 % in the other countries during the next five years as regards the computer industry.

Which changes in the meantime are mapped out for the structure of the company? Above all, what will be the fate of the employees? And what will they have to say about the present and future situations?

Pirelli group

The tyre industry employs about 54 thousand workers in Italy. Of these about 77 % come under the direct control of Pirelli; about 24 000 depend on Pirelli SpA and the other groups of associated companies. Production is centred mainly in the provinces of Milan and Turin.

Sales by Pirelli SpA in 1969 exceeded 215 thousand million lire; they rose to 353 thousand million if sales by the associated companies are taken into account and reach 690 thousand million lire if the whole group is considered. In the selection of Italian groups by importance, Pirelli takes sixth place for its sales.

The tyre industry in Italy is rather concentrated. Only 16 % of the firms have more than 250 workers and they account for almost 80 % of the labour force. In this sector, the absence of labour is noticeable, with a few exceptions—such as special caves for fluid oil—a very advanced stage in technology and automation has been reached.

In 1902, Pirelli were in Spain, in 1914 in Great Britain, in 1917 in Argentina, in 1929 in Brazil, in 1936 in Belgium. In Basle, Société Internationale Pirelli became the holding company of the group and controls directly the companies of the group outside the EEC. In the Community countries, companies of the group are controlled directly by Pirelli SpA: the Belgian Pirelli SACIC, the German Veith Pirelli and Pirelli France. Other foreign companies are controlled by Pirelli Svenska AB in Sweden and by the Swiss Pirelli Produkte. The multinational character of Pirelli has considerably increased following the integration between Dunlop and Pirelli.

Let us now examine the progress of sales of the company from 1962 to 1969. In 1962, Pirelli International had sales amounting to 146 thousand million lire equal to 41.2 % of the group whilst by 1969, it had risen to 335 thousand million and 48.7 %.

Pirelli SpA in 1962 represented, always in terms of sales, 39 %, in 1969 it had dropped to 31.2 %. Percentages for associated companies in the group remain constant, even if in absolute figures they increased from 70 to 138 thousand lire.

Comparison between the Dunlop and Pirelli groups
(from "FORTUNE")

		1964	1965	1966	1967	1968	1969
Position	D	31	31	36	35	42	
	P	49	52	53	54	54	
Sales	D	885	952	974	1 070	1 080	1 184
(Million $)	P	680	739	848	894	950	1 070
Assets	D	667	723	763	755	871	
(Million $)	P	769	863	911	961	993	
Net profits	D	23 083	25 766	25 010	26 672	27 907	
(Million $)	P	8 130	11 646	23 571	24 970	25 020	
Employed	D	103 700	106 100	104 100	99 000	102 500	108 000
	P	64 690	65 900	67 009	67 739	69 289	76 000

Overall observations

The trend to concentration in industrialized economies goes now beyond every national border and takes the aspect of a *centralisation of capital* which goes much further than the traditional agreements or alliances or divisions of markets. All these aspects follow the same reasoning even though they appear in varieties which go from simple associations to amalgamations, to take-overs, to structures of ultranational types.

In Europe, the large size and dynamic prospects of the Common Market, even prior to stimulating the internal drive for accumulation on the part of companies, had promoted a gradual but massive expansion of American presence.

Like a magnet, the Common Market attracts American capital in the shape of direct investment. This penetration of European industry by large American business interests is without precedent. Something similar occurred in 1920 when, in the wake of the Dawes and Young Plans, American private capital was channelled into the electrical concerns and the motor industry in Germany. At the time, the Germans created an uproar about this kind of offer to conduct their business which they called *Überfremdung*. However, all this is irrelevant in the face of the present capital offensive from the USA in Western Europe. "Patronat Français" the French industrial magazine in its issue of August-September 1964, estimated the size of the American offensive and stated that if it was measured in terms of sales volume, the largest German company would occupy the 27th place in the grading of American companies; the largest Italian company 23rd place and the French, 57th.

General Motors which heads the list of the largest American companies with a volume of sales of 16.5 thousand million dollars in 1963 is amongst the seventeen largest companies in Western Germany; Dupont, the 11th American

company has a volume of sales of 2.6 thousand million dollars, six times larger than that of Montecatini; General Electric, 4th in the list with a volume of sales of 4.9 thousand million dollars is now six times larger than the German AEG.

Today's overall competitive and expansionist strength of American capital is opposed by a considerable limit which ex-President Eisenhower once described as "military-industrial complex." The New York Times expert on foreign policy, James Reston, wrote from London: "American pressure on Great Britain and on Europe, emanates to a large extent from American industry which in turn draws advantages from the vast demands made by the Pentagon ... i.e. that the Governments and industries in this part of the world consider but find that they cannot effectively compete ... unless they combine *into much larger units, capable of undertaking very advanced and costly* development and research projects" (New York Times, 15th April, 1965).

The amount spent on research and development programmes in 1963 was 18 thousand million dollars, compared with 2 thousand million in 1950 In 1963, it represented 3 % of the Gross National Product of the USA. But this amount (of which 7 thousand million dollars were entirely for military purposes) represented 23 % of Great Britain's total production, 27 % of France's, 29 % of the German Federal Republic's, 14 % of the total production of the Netherlands and Belgium; 49 % of that of Italy.

This picture shows the considerable superiority of the large American business firms supported by the enormous demand and the policy of over-bill by Washington.

This leads to an attitude which is above all defensive, as shown in alarming terms by the Chairman of Fiat, Gianni Agnelli, who at a Press Conference in Paris in March 1965, asked European industry for a greater unity to face the *American companies' onslaught. He said:* "the prodigious development of American economy imposes imperatively the joining of forces of our old world" ("Le Monde", 4th March, 1965)

The change in these developments can better be seen if considered against the background of capital internationalisation in modern times.

International centralisation of capital is unlike national centralisation in several important respects. Firstly: centralisation occurs almost exclusively in *the oligopolistic system.*

The motive power and expansion potential of international monopolistic strength appear to be driven by nuclear energy if compared with the competitiveness of mechanical industry in the sudden fall in world competition in the 19th century. The international giant *of our days tends not only to sell in*

the market but to dominate it and the main instrument for this domination is direct foreign investment which will also secure the supremacy in foreign markets—a phenomenon unknown at one time but wellknown during the period between the two World Wars and typical of economic relations between countries industrially advanced on the one hand, and colonies or semi-colonies, on the other. Yet, the attempt to conquer the national market from rivals equipped with highly developed means is a new post-War occurrence.

Decisions to invest and the credit transactions of these giants have often such importance that they have a direct influence on the balance of payments of all countries and can cause the economic policy decided upon by the governments of these countries. Concerning the agreement reached between Shell and Montecatini and the acquisitions by Ford outside the minority of British interests and their effect on the Italian, British and American balance of payments, "The Economist" of London wrote: "they have such massive funds available, moveable at will and independent, that they can alter the shade of every wish national governments may have to control movements of capital" (The Economist, October 1964).

The integration of Western Europe and the creation of the Common Market in particular, have, therefore, attracted large American investments, assured of strong support, from which followed an important internal force of concentration even of a multinational character. From an automatic and unchecked process of concentration can also arise, however, against every appearance, a situation of such instability and imbalance as to slow down West European economic life. Locked in a fight for competition which is always severe and the outcome of which for the large productive complex and large capital is a success, the concentration of European capital increases in rapid leaps and within the various forms of amalgamation and take-over. It seems that joint-stock companies are gaining ground in the centralisation process. A study on the subject shows that amongst the 100 largest industrial companies in Europe, there is also clear share capital; this is the case for all the oil companies and also of other companies such as Nestle, Unilever, Rheinische Stahlwerke etc. "In short, it seems that most of the large industrial companies gradually become joint-stock companies if they have not already acquired this form" (Research by Louvain, September 1963).

From this picture emerges straight away another important aspect; the upsurge of European giants through integration reacts on the economic policy, its main instruments and institutions. The power incorporated in these enormous concentrations of European capital is a law within a law and this power has its own laws determining and directing the integrated trends. Decisions on investment of international capital are quite independent of governments economic policies. An EEC study group has come to the enlightening conclusion that: "large international companies escape to a great extent the restrictions and financial incentives introduced by Western governments, the example of oil

companies has shown in the past that it is illusory to submit such companies to national plans . . . Amalgamations and agreements, the importance of which we have already seen, gradually deprive governments of their means of action in an increasing number of economic sectors" (*Conférence Européenne, Progrès Technique et Marché Commun*, Bruxelles 1960, Vol. 1, p. 245). If such considerations are valid for individual nations, they are even more valid today for the supra-national institutions of West European integration. All the more reason why investment decisions and credit transactions of international giants have disturbing and imbalancing effects which cannot be checked through the normal stabilising mechanisms. Monopoly is a national as well as an international factor of instability and justifies more than ever Keynes' verdict that "it is dangerous to leave in private hands decisions concerning investments "

A minimum of international cooperation is sufficient to ensure a smooth working of the world market only under conditions of a large volume of business negotiated by numerous competing firms unable to determine or to influence price through the weight of supply and which react automatically to every price change in the world market with a change in the volume of production and supply. In other words, a minimum of international cooperation through institutions is sufficient only the moment automatic stabilisation mechanisms can work at national and international levels. It is clear, however, that an increased minimum value of private capital necessary to compete with a possibility of success requires a higher degree of minimum cooperation; at the same time, however, the main difficulty is to maintain that minimum of cooperation. The appearance of international companies with a dominant *position creates an entirely new situation in this respect.*

It is impossible to have a valid theory of economic integration in the capitalistic world without taking into account the new developments in monopolies and the correlation between monopoly and integration Some neo-classical theories on integration are nothing but a brought up to date version of the classical concept of economic harmony This is an unrealistic picture, if not the classical dogma on harmony of interests.

The advent of multinational companies coincides with the largest phenomena of industrial concentration and responds to the same way of thinking. This represents, therefore, an increasing reality born from real needs, which cannot be ignored or opposed by fanciful restrictions. But nor can one accept the utopian vision of a network of companies of a "geocentric" kind, of international mould and having an international pursuit which, according to some futurists could be the foundation of peace and prosperity. Neither the realities of the American challenge nor the Japanese one can justify certain community tendencies of granting incentives or privileged systems; in any case, these companies do not require these nor the childish *illusion—if not the outright* deliberate evasion—that the core of a concentrated process of industrial restructurisation is the key to the solution of structural problems of the economy and of society.

These companies are born from the high spheres of the international economic system, from each national system and, more specifically, from situations and relations of oligopolistic character; for this very reason, questions and problems arise on general structural development and stability of the economy and of society.

Against every appearance, they do not in themselves necessarily lead to the best solutions in terms of prices, nor in certain cases, of technological development. On the other hand—we have only to look at the experience of General Electric—they have caused serious setbacks in employment.

Above all, the presence and policies of multinational companies have forceful and relatively autonomous effects in the mother-country as well as in places of production and marketing, on processes of accumulation, the distribution of resources, type of investments and of consumption, on employment, conditions of work and on international trade and balance of payments, therefore, on development policy and finally on the political outline under a multi-party regime and in conditioning its attitude to evolve towards a more advanced, enlightened and articulated democratic reality. They may even degenerate into instruments of economic neo-colonialism to the advantage of the country of origin, or conversely, to look entirely to business reasons and a kind of international division of work completely divorced from national interest.

It is clear that the search for an overall alternative to these risks and the roots which produce them would arise from an ideological angle which would go beyond the bounds of this talk and of the role of the syndicate. It is also clear that an alteration involving absolute power is unthinkable and would be irrational from an economical-social aspect, not realisable in practice and incompatible with the engagements and realities of international relations.

In the ambit of the present system, I think, therefore, that we can consider two parellel courses which coincide with reality even if they involve considerable difficulty and some unknown element and require a strong sense of purpose and a good deal of application, a programmed economic guide-line and control of the public authorities at national and supra-national level—hence the necessity of setting up authentic powers and instruments in this sense—and syndical action at levels corresponding to the removal and nature of multinational companies.

These are particularly difficult tasks. Yet, the true alternative to these aims is an increasing reality in which the new giants not only follow independent thinking and policies of national and supra-national choices of development and of economic policy, but cause instability and imbalance which cannot be checked through the normal methods of harmonization and stabilisation and are even less able to be reabsorbed through an adventurous automatism.

The difficulty both for public authorities and syndicates is increased by the fact that the zones of influence of these companies are many, moveable and not identifiable with old or new institutional complexes; whilst in these better-defined dimensions, the will, capacity and means of intervention are inadequate to the extent that the EEC itself resembles increasingly a customs union—and, therefore, a development of internal contradictions—more than of a real community.

The task, therefore, is anything but easy but it does not permit alternatives today which are fanciful or subordinate.

THE DEVELOPMENT OF MULTINATIONAL COMPANIES (*)

L. DUQUESNE DE LA VINELLE

The existence of multinational companies, that is to say companies with production units in a number of countries, is not a totally new phenomenon; the technologically most advanced branches of the manufacturing industry and second world war.

What is new, on the other hand, is the extraordinary expansion of such companies in the last two decades. In the geographical zone formed by the six EEC countries, the growth rate of direct American investment has regularly been double the already high one of the GNP. The performance has been no less remarkable in Great Britain, where the value of direct American investments almost quadrupled between 1950 and 1960 and doubled again between 1960 and 1968. In Japan a twelve-fold increase was recorded between 1950 and 1960 (rising from a very low level, it is true) and a four-fold increase between 1960 and 1968.

Another remarkable fact is that only a very small proportion of these investments are in the mining industry; they are chiefly in the petroleum industry, the technologically most advanced branches of the manufacturing industry and the services sector. The explanation accordingly does not lie in the need to seek raw materials outside the United States.

The trend in direct European investment in the United States has been less regular and spectacular. Between 1965 and 1968 their book value nevertheless multiplied by 2.9 as compared with the United States GNP at market prices, which multiplied by 2.2 only.

How can the outstanding success of multinational companies be explained?

It is easy to answer that they have concentrated their efforts on rapidly expanding sectors, either because the demand was highly elastic or because it was possible in such sectors to take advantage of major technical advances.

However, such an answer only moves the problem onto different ground. It remains to be seen why rapidly expanding branches of production have been taken over to such an extent by multinational companies. To say that they want to derive profit from their innovations on as large a market as possible is certainly correct in many cases. But there again the problem is moved to different ground rather than solved. There are indeed other means of deriving profit from an innovation: exporting from the parent company is one of them.

(*) Translated from the French.

Why then has it been relatively little used when customs duties and other trade barriers have been substantially reduced over the past twenty years? Where the cost of transport and/or customs duty seemed to constitute an obstacle to export, why was reccurse not had to selling licences and know-how rather than to direct investment which, at first sight, presents many more risks (some of which seem impossible to assess) and in any case enormous complications by the very fact of the parent company having to transform itself into a multinational group?

At the heart of the problem is the following question: Why has company strategy so often led to the choice of direct investment rather than other means of expansion and why has this choice so often been crowed with success?

Several suggestions may be advanced to explain this phenomenon. We shall look at some of them in the following pages.

One might ask in the first place whether transport costs have not played a predominant part, at least in some cases. The most probable example of this would be the petroleum industry. It is known that if, since the last world war, most of the refineries have been set up in the consumer countries rather than in the crude-oil producing countries it is because it is much cheaper to transport the crude oil than the refined products.

This certainly explains the siting of the refineries but it does not explain the vertical integration of the major oil companies from the extraction of the oil, its shipping and refining to the sale of petrol. Why, after all, are the big oil companies not content to sell crude oil at profitable prices and leave the trouble and risks of refining and distribution to others? The question is the more pertinent since it is well known that the extraction of crude oil is more profitable (except in the United States) than transport, processing and distribution.

The most likely explication is doubtless that vertical integration, although not specially profitable in itself, at least ensures direct access to the final consumers. It is easy to imagine the perilous situation of a company producing crude oil only as compared with companies integrated vertically in a period of relatively abundant supply. The integrated companies would obviously give preference to their own crude oil. Conversely, companies restricted to refining and distribution would find themselves dangerously exposed in a period of relative scarcity of crude oil—unless they can take advantage of long-term purchase contracts.

If this assumption is valid, that is to say if vertical integration is an elementary precaution in the strategy of competition, one can understand why the big oil companies have been forced as it were to become multinational.

:cond possible explanation can be found in the changed nature of the :ical risks. The years 1900 to 1945 saw two outbreaks of war between the ers of Western Europe and in peace-time their diplomatic relations were ›st always bad. This situation was certainly of a nature to discourage ign investments, whether between countries in Europe or between America Europe. To the risk of destruction by war were added those of confisca- as enemy property or because of financial dealings with enemy com- es. The danger of war has certainly not disappeared in Europe but it no er takes the form of a risk of armed conflict between Western powers. The remaining risk is that of war with the USSR, which would be highly y to degenerate into a generalized nuclear conflict, but in that case the g of investments would make little difference to the risk they run.

not easy to weigh up the probability of this suggested explanation. The me of loans to Germany from Anglo-saxon banks between 1920 and 1930 ests that it may be less valid than would at first appear. It is true that were short-term operations, both technically and legally. The monetary s of 1931 had not been foreseen by anybody, so that the leaders imagined aps that if need be they could call their credits in at very short notice ch was not in fact the case). However that may be, this hypothesis can st explain why multinational companies did not spring up earlier. It does it all explain why they have sprung up in the last two decades.

iird suggested explanation is that multinational companies have been essful thanks to the considerable aid they have received from European s, either with the aim of encouraging the creation of employment in rprivileged or depressed areas or out of rivalry among themselves, that is y in the hope of "hooking" a valuable investment that might otherwise a neighbouring country. It is indeed well known that the member States he EEC having, in a large measure at least, evaded the obligation to dinate aid, which is nevertheless laid down in the Treaty of Rome, many inational companies have in fact been able to set up the "sovereign" public orities in competition with one another. The authorities have so to speak dered" the amount of aid and the aid arrangements they were prepared ffer. There is no doubt that this situation has been of very great benefit ultinational companies and companies about to become multinational and speeded up their development. But while it has certainly accentuated the ement it is very unlikely to have caused it. Indeed, if so many States have n to giving such substantial aid to investment it is because national enter- is relatively lacking.

re it existed it has enjoyed the same aid as multinational companies. hermore, multinational companies have developed in a spectacular fashion pan, where they have certainly not received any such aid.

urth suggestion is that the direct investments from abroad which charac-

terize multinational companies are the consequence of customs tariffs and a proof of their protectionist nature. However, this explanation does not fit in with the fact that direct American investments in the EEC have grown at an exponential rate which the successive lowering of the common external tariff has not at all slowed down. Nor does it fit in with the fact that the sales of American subsidiaries in Europe far exceed, in most branches of industry, the value of the corresponding American exports; apparently direct investment is not a "substitute" for exports. Lastly this hypothesis by no means explains why direct investment has been preferred to the sale of licences and know-how.

It can be advanced, as a fifth hypothesis, that because of wage differences production costs are higher in the United States than in Europe. Consequently capital has been transferred from a high-cost area to lower-cost areas according to a well-known classical pattern.

In fact the rare comparisons available seem to indicate that this is often the case.[1] However, it may be wondered whether so many decisions to invest, mortgaging the future for so long and even changing the structure of firms, could have been taken on the strength of an advantage in respect of cost which might disappear rapidly with a differential trend in wages and/or changes in rates of exchange. This hypothesis does not explain either why American investments fell off in Great Britain and investors gave relative preference to the Community countries as soon as the Community was set up.[2] Lastly, can it explain why direct investment has been preferred to the sale of licences? Could not the amounts charged have covered a large part of the advantage in respect of costs in many cases? There are accordingly many reasons to doubt that the relative levels of production costs offer a significant explanation of the success of multinational companies. Surveys carried out show that the heads of the firms concerned mention it very rarely among the major reasons for their decision. But they usually mention it nevertheless, among their secondary reasons. All told, it seems reasonable to agree that the advantage of lower costs has encouraged direct investment outside the United States by numerousAmerican companies and has thereby promoted the development of most of the firms that can be regarded today as multinational. Nothing, however, justifies regarding this factor as the decisive one.

There is a sixth hypothesis, to the effect that efficient marketing is essential to the success of most of the innovations in industry. Marketing must be understood here in a broad sense covering all the producer-consumer interactions: market surveying, keeping watch on competitors, advertizing, price adjusting, adapting the product, its presentation, its packaging, etc. It is well

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[1] The advantage of lower wages is partly cancelled out, however, by the higher cost of other factors (energy for example), intermediate products or auxiliary services.

[2] For although the Treaty of Rome gave prospects of a larger market, it changed nothing in the short term in regard to the relative levels of costs.

known that the management of American firms attach great importa the marketing side when it has been decided to penetrate a new market a it on a level with production management and financial management (w rightly or wrongly matters little at this stage of the argument). Fro standpoint, it is logical not to leave the marketing side to others when o decided to launch a product on a new market. To forgo control of mar one would need to have the twofold conviction that the proposed p would be more efficient and that there would never be any problems wit of opposing interests. Common sense tells us that such a conviction wo very rare, particularly in the minds of American managers with a lo perience of marketing.

But if one decides to keep control of marketing, many good reasons in keeping control of production also. It is difficult to see what advantage would be in a structure where a parent firm, which had developed the p and remained in charge of any improvements to it and had handed o one of its subsidiaries the task of promoting it on the external market, l production for that external market to another firm manufacturing it licence. Such a situation would not be satisfactory for the hypothetica side firm unless it enjoyed guaranteed prices for quite a long time, would be a very costly concession on the part of the parent firm, mor would be forgoing all the advantages of integrated management. In parti any question of modifying the product or perfecting the production pro could give rise to litigation between the parent company or its sales subsi and the company manufacturing the product under licence, this latter pany would then be embarrassing rather than helpful as an intermediary.

Although concisely stated, the foregoing probably suffices to show that best company strategy consists in keeping control of marketing on an ex market, it implies at the same time keeping control of production fo market. It remains to be seen in that case whether it is preferable to e the product from firms situated in the country of the parent firm or wh it is better to set up production units abroad.

It is at this point that the factors of relative cost of transport of raw mat and the finished product, relative costs of production in different p customs duties, State aid, etc. come into play.

It is known that as a general rule, for an equal distance, the transpo finished products costs more than the transport of the raw materials req for their manufacture. There are indeed some exceptions to this rule but are becoming less and less numerous as technical progress (size of ships, goods-handling machinery, for example) lowers the relative cost of trans ing raw materials. This fact is worth stressing because, being technologic character, it has a permanence that the relative levels of wages, customs d

and State aid do not have to the same degree. It should be noted, however, that in the last decades these latter factors have all acted in the same direction as *the relative cost of transport*, except in the United States where wage levels most usually have acted in the opposite direction.

The argument in regard to the last hypothesis may be summed up as follows:

(i) Efficient marketing can be a strategic factor in the decision to derive profit from an industrial innovation on a new market.
(ii) If that is the case, the firm possessing the innovation will generally have advantage in keeping control of that decisive factor and its management will be strongly inclined not to give it up.
(iii) But the decision to keep control of marketing usually entails the need to keep control of production also, because of the manifold advantages of integrated management.
(iv) Moreover, the relative costs of transport and the effects of customs duties and of State aid will almost always incite firms to bring production close *to the consumer*.
(v) The relative costs of production seem to have been influential in the same direction in the majority of cases, except as regards firms set up in the United States.
(vi) There exists, therefore, a whole battery of reasons for thinking that direct investment is usually the best means of deriving profit from an innovation on an external market (provided that it be large enough and far enough away from the parent company).
(vii) But recourse to the strategy of direct investment calls for the "multinationalisation of the parent company.

Can one be absolutely sure, however, that the basic assumption is correct? It is difficult to be absolutely certain in such cases. But nobody can doubt that efficient marketing is essential to success. The only arguable point is whether it is essential enough to provide the key to the expansion strategy that has led so many firms, especially American firms, to become multinational. There is one indication that seems very significant; heads of American firms questioned about the reasons for their direct investments in Europe have almost invariably mentioned first the size of the market and its prospects of expansion. If this is the answer that regularly comes to their mind, it is natural that they should have attached primary importance to marketing and have made it the pivot of their company strategy.

This is a hypothetical explanation but a very plausible one, considering that the strategy of direct investment has so often been adopted. It cannot be said, however, to explain at one stroke the frequency and the success of the phenomenon. Indeed, to set up *numerous* integrated firms in many countries and manage them efficiently in all respects is a very attractive scheme... on paper. It still remains to master the enormous complexity which inevitably

known that the management of American firms attach great importance to the marketing side when it has been decided to penetrate a new market and put it on a level with production management and financial management (whether rightly or wrongly matters little at this stage of the argument). From this standpoint, it is logical not to leave the marketing side to others when one has decided to launch a product on a new market. To forgo control of marketing, one would need to have the twofold conviction that the proposed partner would be more efficient and that there would never be any problems with him of opposing interests. Common sense tells us that such a conviction would be very rare, particularly in the minds of American managers with a long experience of marketing.

But if one decides to keep control of marketing, many good reasons incite to keeping control of production also. It is difficult to see what advantage there would be in a structure where a parent firm, which had developed the product and remained in charge of any improvements to it and had handed over to one of its subsidiaries the task of promoting it on the external market, left its production for that external market to another firm manufacturing it under licence. Such a situation would not be satisfactory for the hypothetical outside firm unless it enjoyed guaranteed prices for quite a long time, which would be a very costly concession on the part of the parent firm, moreover, would be forgoing all the advantages of integrated management. In particular, any question of modifying the product or perfecting the production processes could give rise to litigation between the parent company or its sales subsidiary, and the company manufacturing the product under licence, this latter company would then be embarrassing rather than helpful as an intermediary.

Although concisely stated, the foregoing probably suffices to show that if the best company strategy consists in keeping control of marketing on an external market, it implies at the same time keeping control of production for that market. It remains to be seen in that case whether it is preferable to export the product from firms situated in the country of the parent firm or whether it is better to set up production units abroad.

It is at this point that the factors of relative cost of transport of raw materials and the finished product, relative costs of production in different places, customs duties, State aid, etc. come into play.

It is known that as a general rule, for an equal distance, the transport of finished products costs more than the transport of the raw materials required for their manufacture. There are indeed some exceptions to this rule but they are becoming less and less numerous as technical progress (size of ships, mass goods-handling machinery, for example) lowers the relative cost of transporting raw materials. This fact is worth stressing because, being technological in character, it has a permanence that the relative levels of wages, customs duties

and State aid do not have to the same degree. It should be noted, however, that in the last decades these latter factors have all acted in the same direction as the relative cost of transport, except in the United States where wage levels most usually have acted in the opposite direction.

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stems from such a geographical dispersion of activities and the additional complications arising from different languages and customs.

Here we need not hesitate. The chief explanation lies in the quality of the management which has been able to perform this feat. The fact that the gigantic machines that multinational companies come to be succeed in functioning, making a profit and, so far at least, expanding much faster than the GNP of the countries where they have their works, is a truly praiseworthy achievement. An exploit is an exploit, even though one may sometimes find some of the methods used open to criticism.

However, the men who achieved this feat had at their disposal means that their predecessors did not have. The first of them is the aeroplane. From New York to Paris by sea takes at least six days. By air it scarcely takes more than six hours. The cost of manager travel, that is to say the "entrepreneur" factor in classical economic terminology, is thus reduced by at least 90%. Without air travel, which enables the manager jet-set to be ubiquitous in a way that would have been undreamed-of in 1930, it is not at all sure that the strategy of direct investment would have been adopted so often nor that its success rate would have been so high.

The second tool is the computer. It is well known that the difficulty of absorbing and processing information is one of the principle factors that restricts the size and complexity of organizations if they are to be efficient. The computer is an extraordinarily powerful instrument for the storing and processing of information. Logically its use should have the effect of greatly extending the optimum dimension of organizations in general and of firms in particular. It is accordingly a plausible hypothesis that it should partially explain the emergence and success of multinational firms.

The foregoing is an attempt to explain the rise of multinational companies. As that rise is a fact of history and there is no means of going back in history to check the accuracy of the explanations put forward, they will remain for ever suppositions. The only other thing that one can do to prepare better for the discussion of the problems raised by the existence and expansion of multinational companies is to situate them in the contemporary socio-cultural context. For this purpose we must be bold enough to interpret the moment of history in which we live and of which we are the eye-witnesses. Again, if it is a matter of history it is not possible to do more than advance plausible hypotheses. Such an exercise cannot be vain, however, since it is always easier to understand a phenomenon if we situate it in the overall context of which it forms a part: we see the trees better if we look also at the forest.

To speak of the speeding up of history, of change, of revolutions, has become a common-place. The newspapers are full of such expressions applied haphazard to the news of the day. But behind these common-places can be dis-

cerned a question of the greatest interest for any mind which seeks to understand the world in which it lives Is there a link between the changes we believe we see in the most diverse fields?

Lastly, if such a link exists, does it allow us to discover the epicentre of this world-wide upheaval, this historical earthquake of which we seem to be the privileged witnesses?

To endeavour to answer these questions, it might first be useful to ask ourselves whether the phenomenon we are witnessing has any precedent which we could grasp better thanks to the perspective afforded by time. The example of the Renaissance leaps to the mind. The history textbooks we read in our childhood or youth define it as a time of particularly radical and rapid change in all the spheres of social life: science, technology, culture, economic affairs, political structures . . If we seek to work out more precise parallels we can easily produce the following table·

Renaissance	XXth Century
Science	*Science*
—The earth is not flat but spherical.	—There is an equivalence between matter and light.
—It is not the centre of the universe but only one of the sun's planets.	—There is no absolute measurement of time.
—This planet revolves in *empty* space.	—No distinct break between the human and the infra-human. Human nature is not rigorously constant.
—Although empty, this space is capable of transmitting the force of gravity.	—Man dates back at least 500 000 years.
—Rediscovery of the civilization and scientific knowledge of antiquity.	—Man's conscious mind is accompanied by a subconscious mind.
Religion	*Religion*
—Reformation and Counter-Reformation.	—Oecumenism, Vatican II and its consequences.
Technology	*Technology*
—Compass, sextant, stern-post rudder: make voyages of circumnavigation possible.	—Computer, radio radar; make interplanetary travel possible.
—Gunpowder: revolutionizes the art of war.	—A and H bombs, revolutionize the art of war.
—Printing: dissemination of knowledge and primacy of written ex-	—Cinema and television: dissemination of knowledge and primacy of

Renaissance	XXth Century
pression of thoughts and emotions.	audiovisual expression of thoughts and emotions.
Painting —Replacement of mystic and symbolic painting by scientific, humanistic and generally realistic art.	*Painting* —Birth of a new kind of painting, for the most part anti-realist: impressionist, abstract, non-figurative, surrealist.
Architecture —End of Gothic art and flowering of the Renaissance style.	*Architecture* —Radically new designs seeking to use new materials and new techniques.
Education —Unrest in the Universities, foundation of the Collège de France and the Jesuit colleges.	*Education* —Unrest in the Universities, crisis in education.
Economic affairs —Intercontinental sea trade, the first large banks, the first manufactures, intensification of trade, growth of towns, slow disruption of the closed mediaeval economies, first indications of national economic policy (Bodin- de Malestroit controversy).	*Economic affairs* —Intensification of international trade (except during the wars and the crisis of the thirties), growth of towns, first indications of an international economic policy (IMF, aid to under-developed countries), the first multinational companies.
Politics —Formation and hegemony of the first national States.	*Politics* —Rise and hegemony of continental States.

This table makes no claim to be exhaustive nor to take account of subtle distinctions. Its sole purpose is to bring out the main lines of similarity (not of identity) between two historical contexts, we might almost say two historical junctures. Needless to say we do not seek to deny or underestimate the changes that took place in other periods but simply to recognize, as common sense and all historians direct us, that there are times when changes are more rapid, more radical and more widespread than at others.

It remains to be shown how these changes interlock to form a historical context or, better, a historical juncture.

In certain cases the connections are obvious. For example, the painting of Leonardo da Vinci is inconceivable without the rediscovery of Euclidean geom-

etry and Greek humanism; impressionist painting depends on the discovery of the decomposition of light; surrealist painting is explained by the discovery of the subconscious; the invention of gun-powder helps to explain the rise of the national States, since a mediaeval principality could not keep up an efficient artillery; similarly, nuclear weapons help to explain the hegemony of continental States; the difficulties of the Church at the Renaissance period were bound up, as everyone knows, with the rediscovery of the civilization of antiquity but also with astronomical discoveries, as the trial of Galileo amply demonstrates; nowadays the religious crisis is certainly not unconnected with the discoveries regarding the subconscious and the origins of mankind; as for multinational companies, it is suggested above that their success is due probably in part to the development of aviation and the invention of the computer.

These examples show that there are special connections between a certain number of the components of each of the historical situations compared. It is thus right to speak of a historic "juncture". Can we go further and identify the chief component, the epicentre to which all the changes noted are attached directly or indirectly?

The most attractive hypothesis here is that which situates the epicentre in the sphere of scientific knowledge, whether it concerns nature, man or his past. Indeed, discoveries like those referred to above are of fundamental importance for man because they change the way he sees himself and his relations with the world. The oldest-established truths in this field suddenly seem outmoded; they must be replaced by others or at least interpreted differently. A cultural traumatism is the normal corollary of such a situation. It leads people to challenge everything in all the spheres of culture and morals and even in social and political affairs. This would explain that excitement of the human genius[1] that we have come to know as "the" Renaissance because so far it was the only one we knew.

Naturally, in such a context the passion to innovate is just as strong as that to challenge everything: that is why "renaissance" periods present such flagrant contrasts between phenomena of creativity and phenomena of disorder.

The excitement lasts until civilization has found a way of adjusting to the new fundamental truths and a social and political order has come into being that is more or less in harmony with the cultural changes that have occurred.

The interest of such considerations from the point of view of this report is that they show how wrong it would be to think that the problems facing multinational companies and those facing the social and political order can be detached from their context when they are an integral part of a world-wide

[1] Of the noosphere, Teilhard de Chardin would have said.

challenge that the historical juncture is throwing down at the feet of our civilization.

In spite of their success, multinational companies have many internal problems, stemming on the one hand from the co-existence within them of staff, and especially higher-grade staff, of different nationalities and languages and on the other hand from the fact that, being of national origin, their general management is, with few exceptions, exclusively national.

To keep staff severely segregated by language or nationality in order to avoid misunderstanding and conflicts or the formation of cliques is certainly not the ideal solution. It affects the mobility of staff and consequently leads to poor use being made of individual talents. To impose an insignificant common denominator in the shape of a knowledge of the language of the parent company is not a satisfactory solution either. The right solution necessarily involves, so it would seem, the possibility of cultural exchanges resulting in mutual enrichment and esteem. Given this, multinational companies would take on quite a different appearance: they would be revealed not only as remarkably successful technical and economic enterprises but also as major instruments for the progress of civilization. By achieving this they would help to direct the human energy manifested in the socio-cultural upheaval of our time into constructive channels. To work out concrete means of pursuing such a policy would be a splendid task for industrial sociologists.

The other aspect of the problem facing multinational companies is that of the uninational character of their general management. It will readily be understood that no solution has yet been found. How can groups which obtain their new blood chiefly by co-opting be persuaded to take of their own accord the step of becoming international? How can we answer the objection that this would imperil the homogeneity of the management team, which is manifestly essential? It has sometimes been suggested that multinational companies might adopt a polycentric structure. But how then could a coherent company strategy be preserved? In reality, it would seem that the solution of this second aspect of the problem depends on the solution of the first: the education of a managerial elite whose members would be appreciative of each other's cultures. From this standpoint we can guess at the great advantage of a new humanism, founded less on a knowledge of the Greek and Latin languages and civilizations than on a knowledge of several contemporary languages and cultures—Western ones to begin with. Perhaps our schools and universities are already making their first steps in the direction of a new humanism. Would it not be natural, after all, that a new humanism should come out of a new renaissance?[4]

If that could come about, nothing more would stand in the way of the inter-

1 Cultural internationalization is not equivalent to a denationalization of individuals. Greeko-latin learning has never denationalized persons. Anglo-franco-germanic culture, for example, would not do it either.

nationalization of the general management of multinational firms. The problem would be solved definitively and at the root. In the meantime it should be possible to find at least partial solutions. The author's personal experience in the European communities encourages him to think that Europeans, those of the Continent at least, are astonishingly ready—*provided that certain favourable conditions are present*—to recognize a common interest and take it to heart as a cause to serve. The minimum conditions are that the lead should come from above, that it should be recognized by the people concerned and that these latter should be treated with impartiality whatever the intrigues fomened from the outside.

Even when these conditions are present, we are still some distance from the ideal because the reciprocity of language knowledge is very imperfect and because the cultural exchanges are insignificant and do not extend outside the professional sphere. Nevertheless a certain degree of mutual understanding and esteem may be achieved, its value may be appreciated and it may promote efficiency.

What can be done in a civil service has even more chance of being achieved in the business world, subject to the same minimum conditions. Let me here say a word in favour of the "European company" scheme. In addition to all the economic, legal and fiscal arguments that can be put forward, there is one important psychological argument· a "European company" would not fly the flag of any one country. This fact alone would help greatly to ease tensions in the multinational companies which adopted this status Symbols are often more important than might appear at first sight.

But the possibility of setting up "European companies" would not solve all the internal problems that multinational companies have to face precisely by reason of their multinational character.

In addition to the problems mentioned above, which it can be agreed are unlikely to be fully solved in the near future, there are many others that it is urgent to solve somehow or other, for better or for worse.

One of these problems is the fair treatment of the different subsidiaries The control exercised by the parent company enables it to share the group's profits as it wishes among the subsidiaries and between them and itself. Various techniques may be used for this purpose and in particular the fixing of arbitrary prices for the goods and services supplied by one company of the group to others. Such practices, *although they may benefit the group* as a whole, may adversely affect minority shareholders if any, as well as the staff of a given subsidiary where there is a profit-sharing scheme. As things are, the management of a multinational company has sole authority to settle this delicate matter of professional ethics and is accountable for its actions to itself alone.

The situation is similar when it comes to the siting of extensions of the company. The parent company is perfectly entitled to transfer the group's available funds from one region or country to another. It can be assumed that in such a case, as in the preceding one, the management will act in the interests of the group as a whole. The hard realities of competition doubtless make it difficult to depart very greatly from this line of conduct. There are nonetheless problems of equity which arise in specific cases. For example, the chances of promotion for the staff—particularly the higher-grade staff—of extension subsidiaries are greater.

Is it a matter of indifference whether the reserve profits with which the extension was financed were made by the subsidiary in question or by another? True, people are paid for the work they do but they also attach importance (and rightly) to their career prospects. Now, here again, the management of the parent company is accountable for its decision to itself alone. The reason for this is that they have no valid challengers. True, they can be challenged by governments or trade unions, but as both of these are purely national, their respective attitudes are very likely to be contradictory. In the face of divided and even rival challengers, multinational firms are the sole arbiters of the interests at stake. This situation will continue as long they are not faced with a partner as multinational as themselves.

Common sense suggests that to give subsidiaries a certain measure of independence *vis-à-vis* the parent company would be an acceptable middle course between the complete decentralization of multinational companies and the centralization of their decision-making at the level of the parent company. Certain multinational companies have this arrangement and are well satisfied with it, since a measure of decentralization has many advantages.

Others, however, have a different policy. It can happen, for example, that the European manager of an American subsidiary receives a telegram from the United States stating individually—by their number—the members of his staff to be dismissed. It is clear that such practices are quite inadmissible, both for the staff and for the manager, who is reduced to being a simple post office. But when one looks around for effective means of putting a stop to such dictatorial practices one comes back once again to the absence of any valid challenger.

A problem bound up with that of the independence of subsidiaries is the question of the nationality of the members of the Administrative Board and the management, not of the parent company but of the subsidiary itself. Some multinational companies evict systematically from the management any person who is not of the nationality of the parent company. It can be allowed that this is not done chauvinistically but for reasons of convenience, at least in the short term. The situation is nevertheless an unfortunate one, both harmful and humiliating for the country where the subsidiary is set up. Once again effective counteraction would require the existence of a valid sparring partner.

Perhaps the States of the European Community will manage one day to present a united front in the face of such a problem as that, but how long will it be before they do so?

The internal problems of multinational societies are chiefly of a social order; they concern many Europeans and hence also their governments. But the existence of these companies raises in addition, or accentuates, certain problems of economic policy or of general policy some of the most important of which it is worthwhile describing.

An initial problem is one which concerns the capital market, or rather the capital markets. The clauses of the Rome Treaty relating to the free movement of capital have been more or less respected but no single European capital market has emerged. Indeed, not only have national currencies remained distinct but they are also capable of changing their value in relation to one another. Furthermore the regulations regarding share and loan issues have not been standardized. The Treaty of Rome made no provision for this in any case. That is quite irrational, since one of the aims of the Treaty was to promote a change in the size of firms called upon henceforth to supply a continental market instead of a national one. Logically the financial needs of such firms would increase proportionately, so that it could be foreseen that national capital markets would one day be found too small to meet firms' requirements. That day has come sooner than anticipated because the subsidiaries of multinational firms, particularly American firms, assumed continental proportions, economically speaking, right from the start

The absence of a European capital market has since been palliated to some extent by the constitution of a Euro-currency market, principally in Euro-dollars. It is well known that the development of this market was facilitated by the existence of the gold standard and the recurrent deficits in the American balance of payments.

The manifest disadvantage of the system is that interest rates on the Euro-dollar market are directly influenced by the decisions of the Federal Reserve Board, which acts with an eye to the situation in America and not in Europe. True, central banks in Europe can influence it by buying or selling Euro-dollars but they cannot do so effectively unless they concert their action, especially if the Federal Reserve Board is taking the opposite course. The paradox is accordingly that the central banks of Europe are faced with an American capital market which, moreover, they can only influence by countering if necessary the action of the Federal Reserve Board. Who would regard as normal a situation in which several central banks are interested in regularizing the same capital market?

Doubtless we should not dramatize the situation. In a world in which transactions enjoy a certain measure of freedom, the financial markets do not

e in a closed circuit and national monetary policies influence one an- This interdependence is nothing new and it was not brought about by national companies. They have simply contributed a new aspect to it, y the passage through a third currency to finance investments that are ean (by their location) with capital that very often belongs to Euro- . In addition they are not at all at fault; in seeking the least costly means ancing a firm is simply acting strictly within its rights. Nor can one blame either for moving their liquid assets in such a way as to preserve them fluctuations in exchange rates. "National" firms do the same when they

ost it might be claimed (and it still remains to be proved) that multi- al firms' financial and cash transactions are likely to reach such propor- that national monetary authorities might no longer be capable of per- ng their function of regulating the money markets. Supposing that this is t would only prove that national monetary authorities have no adequate gements among themselves or else that monetary union is the corollary pooling of goods and services. If monetary union is thought to be pre- e, and there are perhaps good arguments in support of this view, then ist be resigned to rely for the time being on expedients.

ier problem frequently mentioned in connection with multinational com- is that of tax evasion. It is true that it is a fairly easy matter for such anies to arrange for profits to appear in the accounts of one subsidiary than another and thus to exploit the tax disparities between the various ries. This problem has already been touched on earlier in its social aspect. gards the taxation aspect, two remarks are called for. In the first place, national companies are not the only ones to indulge in this kind of game. ers was a tax-payer's paradise long before there was any mention of national companies in this connection. Such companies merely have easier to paradises of this kind because of their widely scattered subsidiaries. econd remark is that it is not very logical to complain of tax evasion in se of companies to which States do not hesitate to grant enormous tax ssions, which are only a legalized form of tax evasion, when it is a ques- f attracting their investments.

being said, it remains true that tax evasion, legalized or not, is an un- y thing that should be remedied. What can be done in this direction, er, except to confront multinational companies with a power able to itself respected. Here we have again the problem of the valid partner. etting up of European companies would probably help towards a solution, they would be subject to a Community fiscal authority whose geographi- iquity would give it a bargaining power and an efficiency which cannot hieved by national taxation authorities today. But the problem would n unsolved in the case of firms that did not adopt European company . How could they be confronted with a valid bargaining partner? Can we

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envisage the possibility of greater vigilance on the part of national taxation authorities? Perhaps. But there would need to be an international judicial authority to settle cases in which national taxation authorities made conflicting decisions. Let us imagine, for example, a transaction between two subsidiaries of the same group, subsidiary A in country X supplying goods to subsidiary B in country Y. It may well be that the taxation authorities in country X consider that the price p of the goods supplied had been under-valued while the taxation authorities in country Y consider that it has been over-valued. Naturally both cannot be right. It can be seen from this example that a single judicial authority is needed to settle, at least in the last instance, all disputes relating to the "artificial" transfer of profits from one Community country to another. Logically, the same authority should have jurisdiction in the matter of transfers to third countries, otherwise triangular arrangements would allow this kind of tax evasion to go on undisturbed.

Yet other problems arise, not by reason of the existence of multinational companies as such but because most of them, being of American origin, have a large, if not the largest part of their interests in the United States and because their management is composed of United States citizens. For this twofold reason they may have to bow down to decisions of the United States Government even if the consequences of doing so are deplored in Europe. It was thus that Washington was able, by a unilateral decision, not only to prohibit parent companies from transferring capital to their subsidiaries but also to compel them to repatriate the profits of the subsidiaries to the United States This is also why the European subsidiaries of American multinational companies are in fact bound by American policy in the matter of exports to the countries of Eastern Europe.

That Europeans should be concerned at such a state of affairs is only natural It represents an encroachment on their territory by American sovereignty. But supposing they wished to change the situation, how could they do so?

At the extreme limit one might imagine a European policy of blocking or rejecting all American investments. But the price to be paid in terms of the slowing down of the growth rate, deterioration in the balance of payment and unemployment would be considerable—probably out of proportion to the result hoped for. Most sensible people would no doubt think that it is better to "have" firms exposed to political pressure from the American Government than not to "have" them at all. In addition, for the blocking or rejection of American capital to work, all the States of the Community would have to act in concert or the policy would collapse before very long.

But if a *permanently* concerted policy were possible, a solution less radical and less disastrous from the economic standpoint might be envisaged. United in a common decision-making centre, the European States might have a chance of bringing the American Government to accept the principle of the independence

operate in a closed circuit and national monetary policies influence one another. This interdependence is nothing new and it was not brought about by multinational companies. They have simply contributed a new aspect to it, namely the passage through a third currency to finance investments that are European (by their location) with capital that very often belongs to Europeans. In addition they are not at all at fault; in seeking the least costly means of financing a firm is simply acting strictly within its rights. Nor can one blame them either for moving their liquid assets in such a way as to preserve them from fluctuations in exchange rates. "National" firms do the same when they can.

At most it might be claimed (and it still remains to be proved) that multinational firms' financial and cash transactions are likely to reach such proportions that national monetary authorities might no longer be capable of performing their function of regulating the money markets. Supposing that this is true, it would only prove that national monetary authorities have no adequate arrangements among themselves or else that monetary union is the corollary of the pooling of goods and services. If monetary union is thought to be premature, and there are perhaps good arguments in support of this view, then we must be resigned to rely for the time being on expedients.

Another problem frequently mentioned in connection with multinational companies is that of tax evasion. It is true that it is a fairly easy matter for such companies to arrange for profits to appear in the accounts of one subsidiary rather than another and thus to exploit the tax disparities between the various countries. This problem has already been touched on earlier in its social aspect. As regards the taxation aspect, two remarks are called for. In the first place, multinational companies are not the only ones to indulge in this kind of game. Tangiers was a tax-payer's paradise long before there was any mention of multinational companies in this connection. Such companies merely have easier access to paradises of this kind because of their widely scattered subsidiaries. The second remark is that it is not very logical to complain of tax evasion in the case of companies to which States do not hesitate to grant enormous tax concessions, which are only a legalized form of tax evasion, when it is a question of attracting their investments.

This being said, it remains true that tax evasion, legalized or not, is an unhealthy thing that should be remedied. What can be done in this direction, however, except to confront multinational companies with a power able to make itself respected. Here we have again the problem of the valid partner. The setting up of European companies would probably help towards a solution, since they would be subject to a Community fiscal authority whose geographical ubiquity would give it a bargaining power and an efficiency which cannot be achieved by national taxation authorities today. But the problem would remain unsolved in the case of firms that did not adopt European company status. How could they be confronted with a valid bargaining partner? Can we

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But if a *permanently* concerted policy were possible, a solution less radical and less disastrous from the economic standpoint might be envisaged. United in a common decision-making centre, the European States might have a chance of *bringing the American Government* to accept the principle of the independence

of the European subsidiaries of American companies. They might back up this demand with threats of reprisals in the form of fines, which would have to be taken seriously.

The same principle could be applied to all the possible cases of interference by the American authorities in the operation of European subsidiaries of American companies, such as priority to supplying firms in the United States as against firms in Europe in the event of a political crisis entailing a partial cessation of deliveries of crude oil, or priority of employment in the event of recession, or again decisions by the American Department of Justice in the matter of anti-trust legislation having consequences in Europe. In such cases, as in others that can be imagined, what is important is that Europeans should recognize that the American establishments in Europe are not mere branches but subsidiaries enjoying real, if limited, independence and subject, in European territory, to European sovereignty.

There is no need to bring about the total decentralization of multinational companies to achieve this. Generally speaking, it is enough to secure that the subsidiaries should be responsible for their own day-to-day management decisions in regard to employment, production and prices, leaving decisions concerning company strategy, such as the orientation of research, major investments and the launching of new products, to the parent company. Many large companies are already organized roughly on this pattern; the various establishments that depend on them are treated like so many autonomous "profit centres".

Vis-à-vis the American Government, it is important to have it recognized that American sovereignty cannot be exercised in European territory even indirectly by means of pressures exerted on firms which have subsidiaries in Europe.

Lastly, multinational companies must be rendered incapable of playing off European sovereignties against one another and, for a start, they must not be encouraged by the escalation of offers of aid which must sometimes place them in an embarrassing position, while it is unworthy of Europeans and humiliating for them.

These demands are legitimate but there is no other means of securing them except to confront multinational companies and the American Government with an efficacious countervailing power able to obtain a hearing by putting forward convincing arguments. And to achieve this there is no other way but union in some form or other.

Perhaps too, since all is of a piece, Europeans should decide to do something serious about their common defence. It is difficult to argue on a really equal footing with somebody who is an indispensable protector. But that is another story.

Conclusions

At the conclusion of this effort of reflection, it would seem possible to draw some relatively reliable conclusions.

In the first place, multinational companies are incomparable efficient instruments from the point of view of innovation and economic expansion. Without any possible doubt, they are one of the great "inventions" of the century. Their extraordinary development in the past twenty years is partly explained, moreover, by the fact that their management has known how to use to advantage the new means of transport, telecommunications and information processing that technical progress has made available. From this angle, the development of multinational companies fits into the contemporary technico-cultural scene, from which it appears inseparable. On the basis of these new techniques, the managers of multinational companies have succeeded, wherever they have been allowed to do so, in overcoming the obstacle of the complexity inherent in the efficient management of production, marketing and even scientific research units scattered throughout the world and in bringing together men of all races, languages and cultures. This is a remarkable feat even if the realisation is imperfect in many respects.

The multinational company is also, in all probability, one of the constituents of the economic, social, cultural and political change we are witnessing in our time. It is doubtful whether it would be possible to reject the multinational company without rejecting all change whatsoever. This is possible, it is true, since there is no historical determinism, but to miss a rendez-vous with history is a decision whose consequences may be grave. The example of the Renaissance is worth thinking about seriously in this respect. At that time Germany and Italy were unable to achieve national unity. Both countries suffered from it greatly from the point of view of their political influence, their economic prosperity and their cultural conquests.

If Europe wishes to avoid a very similar fate in the coming decades it must have the courage to face the problems which arise in regard to multinational companies as in other fields. Let Europe beware of falling victim to the illusion that is still passed on by most history textbooks, namely that history ended with the rise of the national States. History will not end until man has ceased to search and to discover. As contemporary man is searching and discovering more than ever, there is no reason to think that the national States mark the end of his political evolution. They only mark a phase of it, like the Greek miracle, the Roman peace or the "Christian Republic" in the Middle Ages.

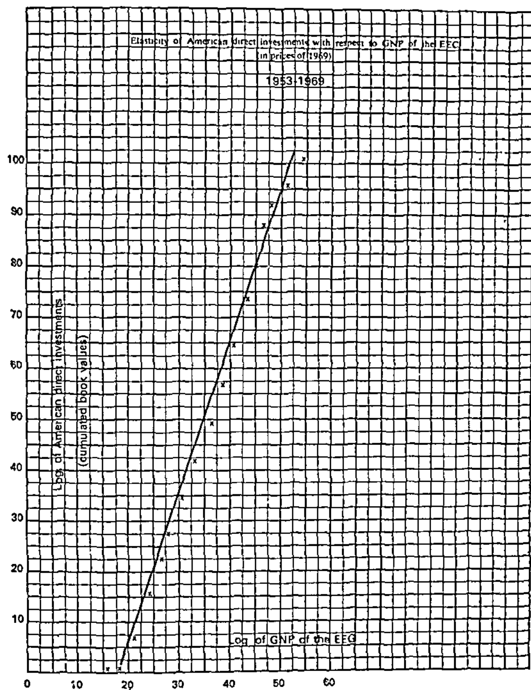
Another lesson of history, and particularly of the Renaissance, is that scientific, technical, social, religious, economic, cultural and political changes are not independent of each other but influence one another mutually. There are

doubtless various ways of approaching them, but it is dangerous and, at the extreme limit, impossible, to accept some and refuse others.

The analysis of these concrete problems raised by the existence of multinational companies brings us back to the question of the valid bargaining partner, whether it be in the social or the political sphere. With the birth of multinational companies, economic structures have moved on to a new "wavelength" to which Europe's social and political structures no longer correspond. In the light of history, it is always the structures that refuse to evolve which go to the wall in the long run.

It remains to be seen how Europe's social and political structures can be made to evolve so that they remain equal to their responsibilities. That question is outside the scope of this report and the author's competence. It is indeed far from depending solely on the multinational company phenomenon. To put it properly one would need to ask: How can Europe still keep its rank and remain faithful to the best that its traditions hold for itself and for mankind at the hour of the hegemony of continental States?

It is clear that such an adjustment requires time and patience. As the proverb says, we must "hasten slowly" and, as another adage has it, patience and time do more than force and rage. But just the same, let us take care not to arrive too late.


Elasticity of American direct investments with respect to GNP of the EEC
(in prices of 1969)
1953-1969
Log of American direct investments
(cumulated book values)
Log of GNP of the EEG
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60

PROMOTION OF INDUSTRIALIZATION IN THE DEVELOPING COUNTRIES: IMPLICATIONS FOR COMMUNITY INDUSTRY

by

P. MOUSSA

H. O. VETTER

J. TINBERGEN

EUROPE AND THE INDUSTRIALIZATION OF THE THIRD WORLD(*)

P. MOUSSA

I - INTRODUCTORY REMARKS

A few remarks about the aims pursued in industrializing the Third World may not be amiss. It is so true that industry is one of the least-developed sectors in the Third World that to say under-developed is as much as to say under-industrialized. For one hundred and fifty years industry has been expanding longitudinally in the world until now it has spread to practically the whole of the Northern hemisphere, but there has been very little latitudinal expansion. Of the world's industrial production, 90% is in the hands of the most advanced fifth of mankind.[1] Per capita power consumption, which is a fairly good yardstick of the level of industrialization, is the equivalent of 10 6 tons of coal in North America, 3.5 tons in Western Europe, 0.7 in South America, 0.4 in Asia and 0.3 in Africa.

The above figures, which show the scale of the industrialization effort to be made, should not cause us to forget that industrial development is only one of the means available to an under-developed country that wishes to increase its national income and raise its people's standard of living.[2]

In many cases, industrial development is perhaps not the most important of those means. Action to increase agricultural productivity is often able to contribute much more to raising the per capita income. Moreover, the improvement of productivity in agriculture is often a decisive factor in industrial development, inasmuch as it frees people for industry where they are needed, feeds them without upsetting the balance of trade and creates surpluses with which to buy abroad the equipment needed for industrialization (provided, of course,

(*) Translated from the French.

[1] Of all industries, that which is to the greatest extent in the hands of the developing countries is the cotton industry (40%), followed by the cement industry (20%)

[2] It should be remembered that investment in industry may have no effect, or an adverse effect, on national income or the standard of living.

they are saleable and do not go, as so often, to swell the volume of world surpluses).

Side by side with the subsisting preponderance of the pre-industrial economy we should not overlook the dawning importance of the post-industrial economy. Since the value of a commodity depends on its relative scarcity, it is natural that as the prices of manufactured goods fall, those of space, pure air, clean water, untouched landscapes, solitude and silence should be rising. This wealth, which the Third World has in abundance, is destined to be used, in forms which we today may find it difficult to imagine, but which find their justification in overcrowding, technological pollution and the extraordinary expansion that can be foreseen in the industries of leisure. The Third World as a reserve —not in the common sense of a reserve of living species, but as a nature reserve in the real sense: it is not impossible that, by the XXIst century, this may weigh more for many of today's poorest countries than the number and turnover of their industries.

The foregoing considerations, designed to situate industrialization in the framework of development as a whole, do not seek by any means, to minimise its importance, especially at the present stage. It is indeed thanks to industrialization that the Third World has seen its production grow at the rate of 5% per annum in the last decade. Statistics for all the developing countries show that the average growth of the value added by agriculture in the years 1960-1970 did not exceed 2%, whereas the value added by industry grew at a rate of more than 7%.

Although it is only one means, industrialization does at least make it possible to increase production capacity, relieve under-development and diversify the economy, making it thereby less vulnerable to short-term trends and less dependent on the goodwill of the advanced countries.

Do not let us forget, either, the human aspects of the question. The mentality of the under-developed countries is definitely directed towards industrialization. The existence of factories reflects for the inhabitants of these countries, and especially for the élites in the broad sense, the success of a nation, its standing in the modern world. The absence of industrial development creates in them a sense of frustration, the lack of factory chimneys gives them a castration complex. As the black American writer Richard Wright says in "White man, listen!", at a certain moment a new religion replaced the old, mutilated one. The Asians and Africans saw that the technology and industrialization had given the whites a footing in their countries and, hoping to recover their freedom, they thought that the only way out for them was to rely on technology and industrialization.[3]

[3] *White man, listen,* Calman-Lévy 1959, Paris – p. 59.

If it is desirable to speed up the industrialization of the Third World, then the EEC and its member countries must give their closest attention to the matter.

(a) in the first place, because the EEC countries have a great responsibility in this respect deriving from their importance in world industry;
(b) in the second place, because the EEC countries have a special duty towards a certain number of countries for reasons at once geographical and historical and this, already true for the Six, has become much more so now that Great Britain is virtually a member of the Community;
(c) lastly, because it is in the interests of the Community countries to see that the industrialization of the Third World is carried out rationally and that no economic ventures are launched which would result in the disorganization of the market.

II—HOW SHOULD THE THIRD WORLD BE INDUSTRIALIZED?

A. The substitution industries

This is the name given to industries whose production takes the place of previous imports. There was a time when many economists regarded them as the best approach to industrialization; the import lists were the reference works of planners and investment advisers.

Indeed it was with industries of this type that manufacturing began in most of the under-developed countries. In numerous cases the process was launched with the last stage of the manufacture of a product assembly of cars and bicycles, packing of pharmaceuticals, hydration and bottling of concentrates... This transfer is often advantageous from a strictly technical standpoint since the last stage often entails a considerable increase in weight or volume and the technical processes involved are simple ones Moreover, it usually implies a small investment for a fairly high added value, since often, at this stage, *mechanization plays a fairly small part.*

Industrial groups see an advantage in transferring the last stages of manufacture to the consumer countries for, although the parent firm loses in this way an outlet for its finished products, it consolidates its outlet for the semi-finished products of the second-last stage. Moreover, to the extent that the local factory fails to meet the whole of local demand, the remainder will be more sure of being ordered from the parent company. Generally speaking, the local authorities would be unwise to oppose the setting up of factories of this type, since the opening of a factory for the last stage often prepares the way, whether the parent company intended it at the outset or not, for the setting up of plant for more stages by a process of ascending integration.

The ease with which substitution industries can be set up depends on a number

of factors. Among the most important, one is common to all industries in any country, namely the cost and productivity of manpower. Others vary from branch to branch: they are concerned with the weight and volume of the finished product as compared with the weight and volume of the raw product or semi-raw product of the previous stage.

In any case, substitution industries were the first to be widespread in the developing countries. In Latin America and a part of South-East Asia most consumer goods, almost half the semi-manufactured goods and one quarter of the capital equipment goods are already produced locally. In Africa the process of industrialization began in the same way but so far it has not reached nearly the same proportions.

Economists today are much more alive than ten years ago to the disadvantage of this pattern of industrial development:

(i) they stress the limits of industrial development begun on this basis since, by definition, it will go hand in hand with the expansion of internal demand which will grow slowly in these still predominantly rural economies;

(ii) from the point of view of the balance of payments, if it be true that non-importation is in itself as advantageous as exportation, stress is laid on the unfavourable effects of the setting up of such industries owing to the indirect needs they create: importing of semi-finished products, of parts for assembly and also of more and more varied consumer goods to meet the demand of the relatively high-income group that forms around the new factories;

(iii) lastly and above all, they are alive to the risk to the economy of sclerosis stemming from the irrational development of industries of this type. Very often the launching of a project of this nature calls for customs protection or taxation measures in favour of the new industry which would not in themselves be blameworthy if they were provisional and moderate but which on the contrary are often excessive and permanent, the more so the less economically viably and the more artificial the scheme itself. This leads to far too high production costs which burden the whole economy and slow down development, including, of course, industrial development. The generalization of strongly protectionist measures in favour of a large proportion of national industry has the same effect on the development of the economy as a whole as an over-valuation of the currency.

In Latin America, notably, because of the protection enjoyed by certain local industries, the production costs of the substitution industries have often risen so high that they have constituted an obstacle to any rise in real income while at the same time they have made any new orientation very difficult.

For example, in the field of car assembly, both in Chile and in Venezuela there are some ten different makes for a production that does not exceed 20 000 to 30 000 vehicles for any one of them. The sales prices to the customer are three times as high as would be those of cars imported in normal conditions. To encourage the incorporation of locally-made parts, the Venezuelan authorities

had devised the imposition of a minimum by weight of local production. The most advantageous solution found by one maker was to equip all his vehicles with a very heavy roof-rack and a reinforced chassis.
In Brazil, where the market is larger, since 400 000 vehicles are produced, the cost of production is still 50 % higher than on the international market but 95 % of the parts are manufactured locally. However, the existence of this industry is preserved by customs duties of 70 to 105 % calculated on a fixed minimum CAF which, in the case of a 2 CV is set at 4 000 dollars, or three times its real value.
A report by the World Bank shows that in 1965 the under-developed countries as a whole spent 2 100 million dollars to produce cars and car-parts whose value on the world market could be estimated at 800 million dollars.

It is such extreme aberrations which explain the reversal of economic thinking on the subject. But care must be taken not to go from one extreme to another. Substitution industries still remain the least hazardous solution in most cases inasmuch as the sectors concerned have markets and they can even be measured. But the under-developed countries must beware, in their enthusiasm, lest they fall into errors and excesses like those cited above. The advanced countries can help them in this and certain suggestions on this point will be made below (Part. III B.1/).

One of the most effective means of obviating recourse to excessive protection is to ensure that the industries concerned have an adequate market which, all other things being equal, will bring down their production costs. For small countries regional agreements can play an important part:

(a) either in the form of regional economic unions embodying a free trade area, or at least reciprocal trade preferences, such as the Central African Customs and Economic Union (UDEAC),[4] the West African Customs Union (UDAO) recently converted into the Economic Community of West Africa (CEAO),[5] the Conseil de l'Entente,[6] the Common Market of East Africa,[7] the Latin-American Free Trade Association (LAFTA),[8] and the Andean Group,[9] which is a sub-group of LAFTA, the Central American Common Market (CACM),[10] and the Caribbean Free Trade Area (CARIFTA);[11]
(b) or in the more flexible form of *ad hoc* agreements between two or more States according reciprocal advantages in respect of specific industries on

[4] Cameroon, Central African Republic, Congo-Brazzaville and Gabon. Chad withdrew from the Union with effect from 1 January 1969.
[5] Ivory Coast, Dahomey, Upper Volta, Mali, Mauritania, Niger and Senegal.
[6] Ivory Coast, Niger, Upper Volta, Dahomey and Togo.
[7] Kenya, Tanzania, Uganda.
[8] Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela.
[9] Chile, Bolivia, Peru, Ecuador, Colombia and Venezuela (with a separate status).
[10] Costa-Rica, Salvador, Guatemala, Honduras, Nicaragua.
[11] Jamaica, Trinidad, Tobago, Guiana and a few West Indian islands.

each side (e.g. the Chad-Cameroon Agreement of 3 April 1963 concerning the harmonization of industrial development in the two countries in the textile and cement industries: sharing of the various branches of the textile industry between the two countries, reciprocal State shares in the two textile firms set up in the two countries, same Franco-German group with interests in both industries and an extra advantage to the Cameroon authorizing the export of Cameroon cement to Chad).

B – The value-adding industries

These industries, which consist in processing animal, vegetable and mineral raw materials on the spot, also among those, like the substitution industries, to which the developing countries are attracted most spontaneously. This is because in the first place the idea is a simple one and also gives them moral satisfaction in so far as the Third World bears a sort of grudge at having to export raw materials which they regard as an inferior class of trade and a manifest form of exploitation (although it should not be forgotten that the United States grew rich precisely in this way and the wealth so acquired enabled them to equip themselves faster than any other nation). The feeling that raw materials should not be allowed to leave the country without some value being added to them is very deeply rooted in the minds of the poor countries and it is reinforced when they see the terms of trade deteriorating for the sellers of raw materials, who are at the same time buyers of manufactured goods.

Broadly speaking, the essential condition for setting up a value-adding industry is that the transport of the processed product should cost less than that of the same product before processing. Here a distinction may be drawn between:

what one might inevitable value-adding, such as is often found in the first stage of processing, when the raw materials themselves are physically or economically untransportable. Thus it is with the ginning of cotton, the shelling of ground-nuts, the concentration of ores ... These are relatively simple actions which consist in separating the useful part of the raw product from the useless part, the two being sufficiently distinct to make their separation a simple matter.
Among these cases of inevitable value-adding we must also count the cases of industries grafted on to the production of cheap hydro-electric power: when in the cost price of a product the share of the cost of the power used is high, of the same order as the cost of raw materials used and sometimes even higher (electrolysis of aluminium, isotopic separation of uranium, etc.) it is exactly as though, economically speaking, hydro-electric power were a sort of non-material raw material and indeed a very heavy one, transportable only at great cost and with great waste. The industries using it have to set up their works near the dam; this is accordingly another case of inevitable value-

adding and hydro-electric power even plays a part in fixing on the spot industries based on certain raw materials produced in the country.

In addition to the limited field of inevitable value-adding, there is the much wider one of theoretically possible value-adding. Where stages later than the first stage of processing referred to above are concerned, the actions involved are more complex and, on the other hand, the lightening effect is much less:[12] for these two reasons the advantage of performing these subsequent stages of the process on the spot is much less evident. Of course, the situation varies from branch to branch and from country to country. All told, however, the prospects of the value-adding industries do not seem very extensive when one excludes the cases of inevitable value-adding. The range of possibilities widens when other favourable circumstances are present in addition to the existence of the raw material on the spot. Among them, the primary factor is the existence near at hand of manpower that is relatively cheap in relation to its productivity. But at this level the value-adding industries merge into the wider category of manufacturing industries founded on advantageous labour.

C – Industries founded on advantageous labour conditions

Here we have a different approach to the industrialization process: the aim is no longer to satisfy local demand, nor to process local raw materials, but to make use of manpower that is abundant and costs less than in the more advanced countries, even having regard to the correction that has to be made for the difference in productivity. It is quite possible for such industries to grow up on the basis of imported raw materials and an external market. This phenomenon is encountered especially where an *industry required a large* labour force, like certain branches of the textile industry, the clothing industry, the leather industry, electronic assembly and numerous small mechanical industries.

This is certainly not a new thing. We have long been seeing the textile and clothing industries moving from the North to the South of the United States before emigrating to Puerto Rico and the Far East. Japan has long been the typical example of a country which, without raw materials, and solely thanks to its abundant supply of high-quality manpower, has been able to develop a vast industrial Sector. More recently, the movement has spread from Japan to Taiwan, Korea, Hong-Kong and Singapore. It is significant that in 1967 manufactured goods accounted for 57 % of the total exports of Taiwan and 67 % of those of Korea.

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[12] In many cases the lightening effect is nil· there is no difference, from the transport point of view between carrying woven material or the fibres that are used to make it or even the raw textile from which the fibres are made, the soaps or oils of which they are composed
On the other hand, it is more economical to transport sugar than sugar cane, oil than seeds, sawn timber and hardboard than unbarked timber, steel than iron, alumin than bauxite, aluminium than alumin.
Besides these considerations of weight, the space occupied plays a part, chiefly at the stages nearest the consumption end; for example, to make wooden or metal articles *near the place* where the raw materials are obtained may encounter an obstacle in the cost of transport of the finished goods.

In the sixties this movement grew,[13] and it seems destined to grow still more in the present decade. This type of industrialization is already widespread in Mexico, Central America, Brazil, Argentina, Yugoslavia—all of them countries which had long centred their industrialization on substitution industries. Now clothing manufacturers from Hong-Kong are setting up in Mauritius and the African continent is beginning to be tapped in its turn. Thus, in Cameroon, the textile industry, designed first and foremost to meet local and regional needs, is expanding in order to supply certain articles to Europe (sheets, for example).

It is a noteworthy situation where, in our present world economy, American firms often have things produced in Europe while, with the enlargement of the Common Market, Great Britain is thinking of having goods manufactured on the Continent and at the same time Northern European firms are turning to the Mediterranean and industry is beginning to move towards Central Africa.

The movement has the more chance of growing since population movements seem destined to encounter more and more obstacles in the future. In the last quarter century, European industry imported a considerable labour force from under-developed or less developed countries, to satisfy needs both in quantity and quality and to take the place of national manpower for work that nationals considered too heavy or unpleasant. But it is clear that in many cases this trend has exceeded what is reasonable and race problems are seen to be arising in various European countries, including those which seemed permanently spared from anti-racial aberrations. If one can no longer bring suitable manpower to the spot, or not enough of it, the temptation is great to go where the manpower is and make it work there. If unable to move manpower which is economically desirable but against which there is considerable feeling, one must needs move industries in the opposite direction.

Unlike the tendency to be observed some ten to fifteen years ago, development experts are inclined today distinctly to prefer industrialization of this third type. It is certain that not having outlets restricted to a small internal market gives hope of a much more rapid sales growth. Moreover, the risk of seeing a young industry become a burden on the country's traditional economy because of the protection and subsidies it enjoys no longer exists where factories are built by definition to supply an outside market. Mr. Robert McNamara, President of the World Bank, illustrated the advantages of this policy to the Board of Governors on 27 September 1971 when he explained that the results achieved by countries which had directed their industrial production towards export were more promising than those of countries whose industry was direct-

13 This redistribution of industrial functions is probably more widespread today than is realized, since heads of firms rarely have any advantage in advertizing too much something that may cause concern in the industrialized countries. Nowadays many articles thought to be manufactured in the West are made—or a great part of the value is added—in the East or the South.

ed entirely towards substitute products for imports. In the first group of countries the growth rate of industry—which had sometimes reached 10 to 15 % —was higher than in the second and the growth in the demand for manpower had been distinctly more rapid.

This type of industrialization nevertheless carries a specific risk: the growth of the industries concerned depends largely on the possibility of absorption by the world market of the new goods produced. It is important that the new industrial revolution which seems to be on the way should not increase production capacity to disastrous excess. Here the industrial countries and the developing countries alike should be encouraged to act with great caution when they remember the consequences in another sphere of a blind policy of diversification of agricultural produce which is causing new countries each year to add to the surpluses of cotton and oil-bearing crops.

Without advocating economic dirigism on a world scale, ought not the industrial countries for their part restrict their interests on the Third World to setting up firms for whose goods outlets are assured? In this respect multinational *companies and in general the major industrial firms in the developed countries* can play a particularly important part in ensuring outlets for the products of industries in the developing countries.

It is in the interests of multinational enterprises to produce in the best conditions with regard to cost price and consequently to spread their different production units by taking account of this factor Furthermore they ought to obtain to the extent possible, raw materials from the countries to which they intend to sell their finished products.

This is why a conglomerate such as IBM has spread its production throughout the world. For example, the main categories of manufactured products exported by Brazil or the Argentine to France are components used in the assembly of calculators and typewriters. Industrial groups, without necessarily investing on the spot like IBM could be interested in obtaining parts from foreign sources and in gaining at the same time part of the market in finished products, since these contribute more than other products to improving the financial and employment position of developing countries.

The firm of Peugeot is conducting an interesting experiment in Tunisia which consists in offsetting all (or almost all) the car parts assembled in its assembly works at Sousse by *purchases* of Tunisian manufactured goods (leather, cloth, batteries, semi-worked products for its forges in France, screws, nuts, bolts, etc.). This idea of balance of trade in industrial goods—since the goods bought by Peugeot are not designed for assembly on the spot but for use at home in France—is particularly profitable to the developing countries, since it furthers the export industries at the same time as it enables an assembly industry to be set up which creates new employment and is in addition competitive,

since the cars are assembled using imported parts which are guaranteed authentic and cost no more than in France.

When we analyse industrial projects of this kind it is sometimes difficult to distinguish what is due to the advantageous local manpower situation and what depends on the determination to win over or consolidate a local clientele. Both factors play their part in many cases. Reflecting on the international redistribution of industry, Malaussena de Perno[14] points to the existing tendency to site the most modern and largest production units in countries which, for the product concerned, are on the upward logistic curve[15] whereas for the more advanced countries the curve in respect of the same product has already flattened out. The large modern production units thus set up accordingly supply simultaneously an expanding local market and the market in more advanced countries, which gradually give up their share in the manufacture of the goods concerned. Here Malaussena considers that world statistics clearly point to a redistribution of industry among four categories of nation: the United States in the first place, which is leaving the manufacture of certain goods to the other categories; then Western Europe minus Italy, which is giving up certain industries and leaving them to the other two categories; then countries like Italy and Japan, which are allowing certain industries to move to the Third World (Japan and Italy have both recently become importers of cotton cloth), and lastly the Third World.

III—ROLE OF THE INDUSTRIALIZED COUNTRIES

It is useless for the industrialized countries to give aid to the developing countries for artificial purposes but as soon as a natural move towards industrialization can be discerned in the Third World countries (and we have seen that this is the case) they can strengthen it and speed it up as well as seeing that the new trend produces rational results, even if only to prevent a subsequent swing in the opposite direction.

To this end, the advanced countries, and notably those of Europe, can give three types of aid: financial, intellectual and commercial.

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14 *Stratégie des grandes firmes et conditions de la croissance généralisée—Premiers éléments pour une théorie de l'oligopole international*, in "Economie et Société", June 1971.

15 The demand for all goods in a given country goes through three stages: slowly rising, then sharply rising, then almost flat once more (which gives a curve that mathematicians call logistic). The extraordinary industrial expansion of Italy just after the war was due to the fact, lagging behind the neighbouring countries, she was in the sharply rising phase for many important products (semidurable consumer goods, household electrical goods, etc.). Italy is now past that stage but other countries are entering on it in their turn.

A – Financial aid

1. *Private export credits*[16]

Private export credits represent an increasing part of the aid given to the developing countries. The amount of credits of this kind accorded by the member countries of DAC was 2174 million dollars in 1970 as against 3406 million dollars in the form of direct investments. In 1961 the figures were respectively 493 million dollars in export credits and 1851 million dollars in direct investments. These credits account in 1970 for more than 32 % of total private capital contributions as compared with less than 16 % in 1961.

Credits to export have rendered considerable services to the industrialization of the developing countries but they nevertheless hold three serious dangers:

Being inevitably tied to the price of money on the markets of the industrialized countries, they are perforce dear and for this reason contribute in a very large degree to increasing the debt load carried by the countries of the Third World, which is today one of the most serious threats to their economy It will be recalled that the debt of the Third World countries, from being almost nil in 1950 had risen to 9000 million dollars by 1955, 35 000 million by 1965 and in 1971 reached 60 000 million dollars. The total servicing of the debt (repayments and interests) costs today 6000 million dollars per annum, or two-thirds of the amount of public aid to the under-developed countries. True, not all the debt stems from export credits and not all the export credits are designed to further industrialization, but the fact remains that this way of financing the setting up of new industries adds seriously to the load of debt carried by the under-developed countries.

In addition, the credits to export are accorded by industrialists and bankers who, while careful about immobilizing funds and risking losses, pay less attention to the profitability of the industrial plant being set up, to the probable skill of its management and to the existence of adequate outlets for its production. To speak frankly, the combination of ignorance and vanity on the part of the buyer and greed on the part of the seller sometimes leads to the building of factories which any expert would have advised against and denounced as a means, not of enriching the under-developed country concerned but of impoverishing it. That is the grave disadvantage of financing by credits to export as compared with financing by private investment, since the private investor has a personal interest in seeing that the production unit being set up is a good one, knowing as he does that he himself will have to run it and he personally stands to gain or lose according to the profit or loss shown by the new factory.

The first-mentioned disadvantage, namely the increased indebtedness, can be

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[16] To describe the credits in question as "private" is only partially correct because of the part played by the issuing institutions in their rediscounting and because the risks attaching to them are frequently covered by establishments in the public sector.

palliated to some extent by combining this mode of financing with others which do not present the same disadvantages, such as private investments and or public financing (subsidies or low-interest loans). The private investments and the public funds may both in theory be of local origin instead of coming from the industrialized countries. However, since we are looking at the subject from the angle of the industrialized countries and the aid they can give, it is clear that the European countries and the EEC should on the one hand encourage private investment by Europeans (see (2) below) and on the other assign a portion of their public aid to financing industrial schemes (cf. (c) below), provided always that this does not distort the production costs of competitive industries.

The second danger, namely indifference to profitability, can be attenuated in various ways:

(a) once again by combining credits to export with private investment;
(b) failing this, by means of technical assistance contracts with the industrial supplier, wherever possible;
(c) by urging the EEC public financing bodies (EDF, European Investment Bank) to exert their influence to the utmost to prevent the setting up of unprofitable industries and to address serious warnings to any underdeveloped countries envisaging setting up such industries.[17] It is recalled that the World Bank has sometimes resorted cautiously, in cases of this sort, to sanctions in the shape of going back on certain other projects or deferring their execution.

2. *Private investment*

The advantage of this mode of financing is, as pointed out in the foregoing paragraphs, that it is inseparable from a contribution by the foreign firm which has taken the initiative to the technical and business management of the new firm and the marketing of its products. This does not mean, needless to say, that any industrial project relying on private investment is necessarily good. In some cases it can kill a thriving local craft, replacing its products by others that may be better, equal or poorer in quality but which, for an equal cost, give much less employment. Moreover, such investments may be accompanied and conditioned by unhealthy protection for an indefinite time.

This means that the authorities in Europe and the EEC must not support private investment schemes without discernment.

[17] True, it would seem more logical to ask the credit institutions to investigate more strictly the justification for the credits sought by the developing countries, but for the most part they consider that their chief duty is to support national exporters and not to further the sound industrialization of the Third World. One could certainly ask them to pay more attention to considerations of this kind. National credit-insurance institutions could be asked to concert their action at Community level so that security would not be given for sales of equipment goods that were economically unjustified. But it is wise to provide in addition for a measure of external supervision, although of course it needs to be informal and discreet.

With this reservation, what are the means at their disposal for supporting private investment in cases where it appears desirable?

One form of encouragement consists in adding public subsidies or loans to the capital provided by private investors (see (3) below).

With regard to taxation, considering the greater risk run by the investor, an effort should be made to achieve at least tax neutrality in respect of investments in the Third World and if possible to accord facilities in the initial stage.

To that end it is essential to generalize the conclusion of agreements to obviate *the double taxation of dividends*, interest on loans and sums owed, while taking care that any sacrifices made by under-developed countries in the form of reduced taxation do not in the end go to swell the tax revenue of the investor's country. When, in order to attract investment, a country decides to reduce its tax, this reduction benefits the taxation revenue of the investor's country if the latter merely sets off the amount of the reduced tax against the amount due to it. The matching credit or tax-sparing credit system removes this disadvantage by making it possible to credit an investor with tax at the normal rate prevailing in the country in which he has invested, in which case it is the investor who feels the benefit of the reduced taxation. Sometimes the amount of tax credited is higher than the tax calculated at the normal rate and so acts as an incentive.

The role, in this field, of the insurance of capital invested against the risks of spoliation is a decisive one. It seems that most European countries now have, or shortly will have, machinery for this kind of insurance. These systems, unequal in their scope, are usually founded on establishment agreements concluded between the investor's country and the recipient country. These agreements differ considerably from one another: those concluded by the Federal Republic of Germany and by Switzerland seem to give the investor the most real protection.

It would nevertheless be desirable to supplement or replace this national insurance machinery by international insurance or reinsurance schemes. Internationalization presents three advantages:

(i) it would help to standardize procedures and protection, making conditions fairer for investors from different countries and encouraging joint investments envisaged by nationals of countries whose protection systems are at present too different;
(ii) all other things being equal, it would spread the risks better;
(iii) it would not only spread the risks but help to lessen them, since it is clear that acts of spoliation, by bringing into play the payment of compensation by the insurer, provoke an unfavourable reaction in the country

or countries who have to bear the cost; the more countries are involved, the greater the deterrent effect is likely to be.

Unfortunately the scheme sponsored by the World Bank for the setting up of an International Investments Insurance Agency (IIIA) is making very slow headway. Pending the introduction of a world system, it would be desirable for the EEC to set up a Community guarantee system. If caution is preferred at the beginning, the system could be confined to investments in the associated States or to investments made jointly by nationals of two or more member countries. This machinery should be modelled as far as possible on the schemes offering the best protection to the investor. Only a guarantee covering the real value of the investment for a long enough time would be likely to change the behaviour of investors. The fear of total or partial spoliation often leads them, indeed, to write off their investments too soon and carefully avoid re-investing on the spot, to the detriment of the long-term interests of the recipient country.

3. *Public capital*

The role of public aid is for the most part lateral to industry, but it is no less decisive for industrial expansion.

It is public aid in particular which enables the necessary infrastructure —roads, port installations, telephone networks—to be set up, without which an industrial project has much less chance of being profitable.

Similarly, public aid devoted to increasing agricultural productivity (teaching correct methods of crop-growing, research to produce species that are specially productive or well-suited to the market, etc.) prepare the ground for an industrial effort directed towards local consumers made more solvent thereby and consequently promotes industrialization indirectly but powerfully.

Apart from this, can public aid serve to cover the capital cost of industrial projects? That is quite possible and very often desirable, either by financing the taking up of shares in the company by the national development bank or any other public body or by granting subordinate loans or taking up bonds convertible into shares. Such procedures, while facilitating the finding of the capital required to set up the firm, have the additional advantage of associating private individuals or corporate bodies in the developing country with the project in question.

It has sometimes been claimed that public aid could be used more systematically for interest bonuses which would reduce the cost to the borrower countries of financing their projects. But in the first place interest bonuses present a serious difficulty for the bodies giving aid, since the undertaking to keep on paying them over a long period means that the institution itself must be assured of sufficient funds for just as long a period, unless it devotes once and

for all to the financing operation a capital sum calculated on the basis of the amounts it will be required to pay out during the period in question. On the other hand, since we are speaking here of financing industrialization, it may be open to criticism to finance the setting up of industries in competitive sectors on terms too different from the price at which rival firms can get capital. True, there are cases where it can be said that this advantage would merely compensate the handicaps under which industry labours in one or other developing country (distance from the coast, need to resort in a large measure to costly aid from outside the country . . .), but care must be taken to remain extremely cautious and moderate, especially when it is a matter of financing investments with a high capital component.

In the foregoing paragraphs we have looked at the influence public aid can exert on industrialization by reason of the purpose to which it is devoted. But it should be added here that whatever the purpose to which it is put the granting of public aid can be the subject of negotiations favourable to industrialization. Since industrialization is held considerably in check by the small population of many of the developing countries, every effort must be made to encourage them to form customs unions or free trade associations. One might envisage according certain advantages in the matter of public aid to the countries which made the most determined effort in that direction.

B – Intellectual aid

1. *Intellectual work prior to industrial investment*

(a) Information about the prospects by the under-developed countries for the siting of industries could well be assembled systematically both by such countries themselves, as far as their means allow, but above all by national or international organizations responsible for development aid
UNIDO, whose function is precisely to promote industrialization, organizes meetings where representatives of the developing countries come face to face with investors from the industrialized countries to debate with them the projects the former hope to see set on foot. Meetings of that kind have already been held twice in Asia and twice in Africa but the experiment is still too recent to allow a definitive judgment to be passed on it. It would seem that the system is improving. Unfortunately, too many of the schemes put forward are inadequately worked out and the risk is that investors will grow tired of travelling to take part in such meetings.

(b) More interesting are the specific studies of the possibility of setting up industry in a given country of the Third World. In this sphere, over-simplifying somewhat one might say that most of the intellectual aid given falls into two categories: on the one hand vast pieces of rather academic research which show the possibilities but without the precision and detail required as a basis for the investment of capital and on the other hand over-concrete studies by a private foreign firm or group,

carried out in support of an already settled intention in line with its general policy. Between these two categories a third is insufficiently represented, namely that of studies at once concrete and precise but carried out before (and not after) the emergence of any settled intention on the part of a private firm.

In other words, it can be seen that in non-industrial spheres (infrastructures, agriculture, etc. . . .) the institutions giving aid have understood in recent years the need to take part in the working out of projects which they are subsequently to finance, but this good tendency is not to be observed to nearly the same extent in connection with industrial development. Thus the World Bank, which had the fruitful idea of setting up teams in Africa to detect possibilities and work out schemes has practically never done this in regard to industrial development. This state of affairs is clearly due to the recognition of the priority of the private sector in industry. That priority, wherever it is recognized by the political philosophy of the under-developed countries concerned, is quite legitimate but it should not result in an inadequate effort on the part of the bodies giving aid to contribute to the working out of satisfactory industrial projects.

One of the ways of sidestepping the difficulty just described is to resort more generally to a procedure sometimes followed which consists in an aid organization financing a feasibility study but having it carried out by an industrial group in the sector concerned (on the Ivory Coast the Aid and Co-operation Fund adopted this plan in order to work out a rubber-planting scheme, and passed a contract for the purpose with a large European rubber group). It is preferable that the financing effort of the aid organization should cover the greater part but not all of the cost of the study. It is suggested that the EEC envisage developing this kind of action.

Wherever the under-developed country is a small one, this action should be multinational rather than national in character. However, it is often illusory to envisage permanent groups of very large dimensions. It would be more practical to suggest the formation of ad hoc groups of two or three countries concentrating on a small number of brances of industry for each of which one of them would be primarily responsible (see Part II, A above, in fine, for remarks on the Chad-Cameroon agreements). One of the most fruitful aspects of the technical assistance provided thanks to European aid might consist, precisely, in promoting agreements of this latter kind.

Here three recommendations may be made:

(i) Before devoting studies of this kind to new branches of industry, it is often worthwhile to begin by studying the possibility of expanding existing industries: if a certain regional agreement were signed, for example, what industry already existing in one of the countries concerned could increase its capacity and so reduce its production costs and become much more competitive—perhaps even capable of ex-

porting outside the region itself? Another advantage of expanding industries in this way is that the management problems, always so difficult to solve in under-developed countries, are solved in this case from the start.

(ii) If an agreement of this kind allocates industry X to country A and industry Y to country B, it does not seem advisable to ask A to give up permanently the idea of allowing any plant in branch Y to be set up in its territory (or vice-versa). Such a permanent undertaking would savour of malthusianism. The undertaking to be asked of country A should rather be that, in the event of a plant in branch Y being set up in its territory, it will be accorded no discriminatory aid and no protection vis-à-vis goods imported from country B.

(iii) Lastly, the exchange of favours between the two countries need not necessarily be concerned with industry on both sides. Favourable terms accorded to an industry in country A to export its products to country B might very well be offset by facilities given to country B to export agricultural or stock-rearing produce to country A.

Thanks to these factors making for flexibility, it is probable that the studies in question will have more chance of leading to realistic proposals.

(c) The industrial technologies of the Western world have generally speaking been developed with a view to:

(i) using the natural produce of the temperate zones, or else tropical products when they can be transported without too great expense, but always to supply the needs of countries in the temperate zone;

(ii) reducing the cost of manpower at the price of expensive equipment, seeing that in the most advanced countries it is usually more economical to resort to manufacturing processes with a high capital component

It follows that the transfer of Western technologies to the Third World often results in an economic nonsense. One of the best purposes to which Western technical assistance might be put is precisely research to develop techniques more suited to the under-developed countries, whether it be a matter of using tropical products not used today, in order to satisfy a demand for industrial goods which are not necessarily the same as those wanted by the Western countries, or of developing manufacturing processes to achieve the best result possible on the basis of a process with a high labour component. Here there is too great a tendency, under the influence of the West, to think that industrial progress is inevitably bound up with evolution in the direction of a more capitalistic industry. On the contrary, progress consists in improving the quality of the product or lowering its price, or, if possible, both at once. Depending on demographic, economic and social conditions, this result can be achieved either by techniques relying heavily on capital or by techniques with a

low capital component. One can imagine a modern technique calling for an abundant supply of manpower, provided that an effort were made to perfect it and to develop the necessary equipment, which would not normally be found in the more industrialized countries.

2. *Supply to the under-developed countries of the "grey matter" necessary for the proper functioning of industrial investment*

(a) We have seen that private investments alone already imply a considerable amount of technical assistance to the new industry.

(b) In certain sectors of industries such as the public services, or because of political options of a general nature, certain developing countries refuse to call on private investments, especially from abroad. They desire, however, in order to develop their industry, the help of private techniques and capital and, for lack of sufficient experience, they want not only the capital equipment but also full-scale technical assistance. Thus it comes about that a *maître d'oeuvre* from an industrial country is asked to work out a whole project, to choose and install the equipment, to get production under way and to assist for a variable period with the administrative and commercial management of the new firm. This is a new complex type of contract which safeguards the receiving country's wish for independence, while enabling it to make sure of the firm's sound economic management by calling in a capitalist from abroad.

The number of such operations to date is limited because it is chiefly the countries of the East, and more recently Algeria, which are interested in this system. The lead was taken, nevertheless, by certain Far-Eastern countries, notably Indonesia which, anxious to further their industrialization and at the same time promote their exports, proposed to foreign investors a similar manner of financing new industries, to be paid for by the purchase of part of the production by the entrepreneur who had set the factory up (known as the "production sharing" system). The investors, apart from the consideration that this system enables them to make sure of a supply of goods they need (raw materials, semi-finished goods, more rarely machine parts) are fairly hesitant as to the possibility of introducing this system more generally. The control of the firm set up passes indeed fairly rapidly into the hands of the recipient country and the firm which has thus concluded a monitoring agreement runs the risk of being faced with a competitor over which it has no hold and which may reduce its future prospects of expansion. Without needing to be rejected outright, this system requires special precautions to be taken to prolong over some time a form of cooperation that is advantageous to both sides.

3. *Training the personnel needed in the under-developed countries*

It is clear that one of the major obstacles to the industrialization of the less-developed countries is the shortage of qualified people at all levels. This forces industrialists (foreign or local) to recruit a large part of their high-grade and

even middle-grade personnel abroad, whence, on the one hand an increase in production costs and on the other the creation of psychological problems among the local population. This shows the decisive importance of aid for training purposes.

The first kind of aid that the developed countries could give the Third World countries in this respect would be to avoid receiving aid from them. Here we are referring to the "brain-drain", whereby all the best and most highly-trained elements in the underdeveloped countries are caught up by the attraction of richer countries which offer them much better salaries and conditions. The Inter-American Economic and Social Council of the Organization of American States has just published the 1969 figures for university graduates in each Latin-American country as well as for those having emigrated from each country to the United States. Among the Central American countries, for example, the proportion reaches 7.1% for Panama, 9.3% for Costa Rica, 15.3% for Honduras, 21.7% for Guatemala, 25% for Nicaragua and 33.8% for Salvador. When one remembers the great cost of higher education, one could say that technical assistance, contrary to all reason, is being given to the industrialized countries by the Third World. It is true to say that it would often be inhuman on the part of the advanced countries to close their doors to graduates from the Third World whose only prospects at home are unemployment if not imprisonment. But at least it would be fitting that the rich countries should refrain from systematically recruiting graduates from the underdeveloped countries and leading them astray.

But let us turn now to positive aid. Just as, with reference to financial aid, we could say that gifts and loans for the development of infrastructure or non-industrial sectors helped to further industrialization, so we can say that any aid given to education in an under-developed country promotes industrialization, even though it be basic, primary, secondary or higher education

However, the emphasis should be laid here primarily on aid for occupational training, whether for executive staff on the one hand or for high-grade technicians, managerial staff and heads of firms on the other.

Executive staff cannot be trained according to methods approaching those of the industrial countries except in countries where industrialization is no longer an isolated phenomenon in economic development. In such cases, wherever employment opportunities in a specific branch exist on the spot it can be envisaged setting up technical training centres, which mean heavy expenditure on the purchase of equipment and teaching materials as well as on installing and paying instructors. Here again the under-developed countries are often too small to justify centres of this kind for one country only.

Where the basic education is very inadequate and industrialization has scarcely begun, it is more sensible to keep to empirical solutions, that is to say action

to meet specific cases bound up with industrialization programmes already launched or shortly to be so. The aim here is to train on the spot the skilled personnel required to implement and run the projects in question, that is to say, upstream from the investment, personnel to start the project and operate the infrastructure involved, at the level of the investment, personnel qualified to make the best use of it and downstream from the investment, personnel qualified to derive the greatest profit from the production (sales, servicing, etc.). As regards the two latter categories, it is usually the investor who takes charge of the training. But even so, since the cost, as we have seen, is so high, it would be desirable for the EEC, thanks to a further diversification of the operations of the European Development Fund, to assume more systematically the cost of the training on which the success of the projects it supports depends.

The problem of training higher-grade technicians and managerial staff presents itself differently, too, according to the level of economic development of the countries concerned. For the countries that are less advanced industrially it does not seem very realistic to envisage setting up higher technical schools or higher schools of commerce and business management. There would not be enough students to allow high-quality training to be provided at a reasonable cost. It is accordingly in-service training that should be promoted. A course spread over several years in the form of evening classes and seminars run by employers' organizations or local Chambers of Commerce and Industry, calling on the experience of foreign industrialists, businessmen and bankers living in the country, would seem likely to be able to meet a large part of the supervisory and managerial staff requirements. It is also the best way of building up a local "head of firm" class on the basis of existing small industrial firms and businesses.

In addition, it would of course be advisable to continue offering scholarships to people from the developing countries to enable them either to take a higher education course in an industrial country of Europe or to spend time working in a European firm.

C – Commercial aid

As the exports of the underdeveloped countries consist chiefly of raw materials, the commercial aid given by the industrialized countries to the Third World must consist in the first place in assisting them to market their produce at prices stable and high enough and in sufficiently large and regular quantities. This is one of the most important ways of helping the developing countries. Even from the point of view of their industrialization it is a decisive factor, both because assistance in marketing the raw materials produced increases local prosperity and hence the demand for manufactured goods, thus encouraging the setting up of industries, and because, by giving States a larger and more reliable income, it enables them to finance the investment budgets without which industrialization is impossible.

Increasingly, however, commercial aid to the Third World must come to consist in marketing assistance for the industrial production of the developing countries. The substitution industries have by definition a practically sure internal market, but the other kinds of industry (value-adding industries, industries founded on a favourable manpower situation) need markets in the industrialized countries. Even the substitution industries, when they expand, have to seek outlets for part of their production on the world market.

What can the Western countries do in this respect?

1. *Marketing aid*

A certain number of moves have been made in the matter of marketing aid, notably the setting up of the International Commerce Centre, depending on GATT and UNCTED, which conducts market surveys, studies export marketing techniques and organizes training courses and consultations on marketing promotion. The EEC is also proposing to introduce a medium-term action programme to promote African and Malagasy products on its market; the programme should be extended to manufactured goods. Mention should also be made of the German move in both the public and private sectors to increase imports from the underdeveloped countries. It is desirable that national and international efforts of this kind should be constantly reinforced.

2. *"Generalized preferences" for Third World countries*

A more substantial, and in some respects more revolutionary, form of action consists in introducing legislation and tariff and other regulations designed to support artificially the partial conquest of Western markets by industrial goods from the underdeveloped countries. Here the EEC has just taken the lead in the direction of a preferential system in favour of the Third World by introducing a measure in 1971 whereby 96 countries recognized as underdeveloped and belonging to the group known as the group of the 77, enjoy for their industrial products a duty-free quota whose size is calculated having regard, for each product or group of products, to EEC imports from the Third World and to a percentage of total EEC imports from other countries. In spite of the precautions taken to restrict the effects of this measure in certain cases, the principle remains extremely important: the EEC has taken the first step in the direction of generalized preferences in favour of the new industries growing up in the Third World. For certain sectors of European industry this represents a sacrifice which should not be underestimated. In any case, it is unlikely that Europe will be able to go any further in this direction unless the other industrialized countries follow suit. Accordingly it is recommended seizing the opportunity afforded by the world trade negotiations in 1972-73 to urge the Western world as a whole to follow the lead given (for the present only Norway and Japan have done so).

3. *Relaxation of quotas*

The quotas that the EEC has not done away with concern for the most part

products which primarily interest the under-developed countries. It would certainly be unrealistic to contemplate the pure and simple liberalization of trade with the Third World. The possibilities in each case have to be studied by the authorities in collaboration with the branches of the economy concerned. This at least must be done, but it must go hand in hand with an adaptation of European industry. We shall return to this in Part IV below.

Let us merely mention here the Geneva Agreement on import quotas in the industrialized countries of the West for woven cotton from various under-developed countries, namely India, Pakistan, Korea, Hong-Kong and Egypt, together with Japan. This Agreement was renewed in 1970 for another three years.

4. *Marketing aid for the industrial production of certain under-developed countries*

A small fraction of the Third World receives more substantial aid from the Community than results from the generalized preferences. Some countries enjoy the intra-Community regime for their industrial exports which, as a result, enter EEC territory duty-free and without any quota restrictions. They are the following:

(i) the countries associated with the Community under the Yaoundé Conventions, i.e. the former French territories South of the Sahara (except Guinea) and Madagascar, Zaïre, Ruanda, Burundi (former Belgian territories) and Somali (for the most part former Italian territory);
(ii) the three States of East Africa—Kenya, Uganda, Tanzania;
(iii) Morocco and Tunisia.
The relaxation of the principle, more frequent in the case of the two last-mentioned categories than for the parties to the Yaoundé Conventions, chiefly concern agricultural commodities.

This privileged situation, which dates back to far earlier than the granting of generalized preferences, has sometimes been attacked, but it must not be forgotten:

(a) that it would be over-simplifying to act as though there were only two kinds of country—industrialized and under-developed. Africa is in many respects more under-privileged than the rest of the Third World, since it is there that education and training are on the whole most backward. Furthermore, the political patchwork for which Europe bears a share of responsibility (although it would be wrong to blame Europe for everything) is a handicap to economic development in general and to industrialization in particular. The vast land mass makes access to a large part of the African Continent very costly and this is a highly disadvantageous factor. Inasmuch as we admit that there are significant inequalities among the developing countries, the same arguments which justify commercial aid

to the group of 77, as it is called, doubtless also justifies extra aid to some of them.

(b) that Europe has very special historical and geographical ties with the countries receiving special aid. We are not living in an abstract world. Europeans may be ready to make exceptional sacrifices for countries with which they have, or have had in the past, very special relations; to force them to forgo that effort is not likely to incite them to any additional effort in favour of other countries

There is no doubt that considerable benefit to the industrialization of an under-developed country may result from its incorporation into an advanced economy. In the history of the rapid development of Canada, Empire preference played no small part, since United States firms setting up in Canada were penetrating a zone which included the British market (whose relative importance was much greater then than now).

It is true that the incorporation of an under-developed country into a highly-industrialized economy may sometimes nip certain industrial possibilities in the bud unless the under-developed country in question is able to protect, at least reasonably and temporarily, its infant industry. This has been well understood by the European countries and notably by the Community which, in the association agreements just referred to, allows the associated countries to protect their budding industries against exports from Europe.

True, the terms of the Common Market association treaties will have to be reviewed in the months ahead, both because of the entry of new members, particularly Great Britain, who brings in a whole new network of special relations, and because of the trade negotiations planned, at the request of the United States, between the large industrial countries of the world, but it seems desirable to preserve the main features of the present provisions in favour of industry in the associated countries.

IV—CONSEQUENCES FOR EUROPE

The policy of aid to the Third World for its industrialization has for the industrialized countries, and notably for Europe, certain consequences which need in conclusion to be underlined.

Considered as a whole, the industrial growth of the Third World constitutes a favourable factor for economic expansion and especially for the industrial expansion of the advanced countries. This growth implies the purchase of equipment, hence outlets for the capital goods industries of the industrialized world. Furthermore, the diversification of production in the developing countries and the rise in the employment rate and the standard of living are reflected in an expansion of international trade; experience never ceases to confirm the truth of the "Balfour law" according to which trade between countries expands in direct ratio to their industrialization. It may be that, together with the expansion of trade relations with the Communist countries, trade with the

Third World will constitute one of the decisive factors, in the decades ahead, naking fcr Western industrial expansion. This rapid increase in sales to the East and South, thanks to the quick growth of solvent demand in those two parts of the world, could well play in the second half of the XXth century the ame part as the growth of the working-class consumption has played in the past. It is a matter in both cases of vast dormant markets, founded on an enormous non-solvent demand, being awakened by economic growth and a rise n individual incomes.

But while, seen as a whole, the industrialization of the Third World is benefi-cial to Western industry, seen in detail, on the contrary, it can imply severe blows to the interests of certain sectors of industry or certain regions in Europe. These ill-effects, apart from the direct harm they do in Europe, can in he long run be harmful to the Third World, inasmuch as they may provoke rrational defence reactions and protectionist reflexes. There is a great risk, if care is not taken, of seeing the least advanced sectors of industry in the ndustrialized countries rise up against the policy of aid to the Third World vith as much vehemence on the part of the workers as of the employers.

The contemplation of this risk calls for three suggestions:

.. Aid to the under-developed countries can no longer be regarded as a sort of almsgiving to the poor countries, chargeable of course to the receipts of the Western industrial economy, but having no real effect on either its structure or its operation.

Already the stage reached by industry in the Third World is such that we can no longer discuss the industrialization of the underdeveloped countries without certain thoughts about it affecting our planning of European industrial develop-ment. National development plans must take account, in their sector guidelines, of the effects of the industrial growth of the Third World. Two parallel lines of action must be followed—one consisting in gradually opening up the Euro-pean market to industrial goods from the Third World and the other in adapt-ing European industry to the situation thus created. We must neither be care-less enough to say "I shall open my doors wide to the products of the Third World and afterwards see to adapting my economy", nor selfish and hypo-critical enough to say "I shall adapt my economy first and open my markets afterwards". The two must go cautiously hand in hand along a path mapped out by the countries of Europe in consultation with their national industries and with one another.

From such consultations and the studies they would necessitate a sound inter-national division of labour might emerge. It could not result from any over-simplified sharing of functions; there is no question, for example, of saying "here we will have manufacturing and there primary production", but neither can it be a question of distinguishing arbitrarily, among the manufacturing

industries, two broad kinds, one of which should more or less speedily be handed over to the Third World. The possibilities of specialization have to be looked into for each branch, having regard to all the facts. The Third World will sometimes seem suited to undertaking, by sub-contracting or other means, a part of the manufacturing process which is not necessarily either the first or the last stage. Or again, the Third World may prove particularly qualified to produce certain grades of a given article, the other grades being produced in Europe—and here again it is not self-evident that the most refined processes will always be reserved for Europe. Thus the Bata group, for example, has ceased the production of cheap shoes in India and started it up in the United States by highly automated processes, while India has taken over the production of more expensive footwear which cannot be entirely mechanized

2. *It remains, nevertheless, that in many cases this policy can lead to a sharp* drop in the growth rate of European production capacity in certain sectors of industry and to the Third World benefiting from a large proportion of the growth in demand in the same sectors. (On the other hand, care must be taken not to run the risk, by an incautious import policy, of lowering the present level of European production).

On these grounds, everything that can be done in the countries of Europe to increase the mobility of manpower from sector to sector and region to region and to lessen the opposition to structural changes acts in favour of the redistribution of industry in the world and of the industrial development of the under-developed countries. Today the opening of markets to industrial imports from the Third World is only one of the causes, and not the most important, of the Structural changes necessitated in Europe. It is probable that it will gradually become one of the most significant causes.

3. For various reasons, it would seem advisable to undertake in the years ahead a radical review of the principles governing world trade:

(a) The United States are calling for world trade negotiations in which the problem of the opening of frontiers to the industrial products of the Third World are deeply implicated.
(b) Great Britain's international ties, both with the under-developed countries and with the rich countries, mean that her entry into the Common Market will inevitably be accompanied by a recasting of the present EEC system of agreements and association.
(c) Certain basic provisions of GATT have received a buffeting in recent years. President Carlos Besa, at the opening of the last session of GATT (16 November 1971) announced that in the eighteen months the GATT Council had been called upon for a decision on ten new preferential agreements and that the process was far from being over. If the most-favoured-nation clause was constantly circumvented in this way one might ask whether it would not be worthwhile to make an effort to work out

and draw up a new set of rather more flexible principles, since to keep a rule which it had become natural and customary to disregard amounted in the end to having no rule at all.

When thinking out these new principles, the under-developed countries should be allowed a fair amount of latitude in their trade relations with one another and the privileged treatment they see fit to accord each other on a reciprocal basis. We have seen (Part II, A in fine and Part III, 1b) that ad hoc agreements in respect of a small number of industrial products on each side and perhaps conferring mutual tariff benefits and discriminatory treatment in the matter of quotas can be of decisive importance for the industrial growth of countries whose national market is too small. More generally, indeed, and even outside the regional framework, encouragement should be given to trade in industrial goods between the countries of the Third World. Experience seems to show, contrary to what reason suggests, that it is among countries which have reached the same stage of development and have comparable economic and social structures that, even if their production extends over roughly the same sectors, trade develops most intensively. No obstacles should be raised but, on the contrary, every encouragement should be given to the introduction of mutual preference among newly industrialized countries.

But perhaps we should conclude on a more general note. A quarter of a century after Havana and Bretton Woods, the coming year, or perhaps rather the coming years, will see the discussion of the new world trade and monetary system. It is essential to arrive at solutions which, although different from the earlier ones, fulfil the same function in a different context, namely that of preserving a climate of expansion in international trade, which requires precautions to be taken in the first place to see that individual States do not abruptly introduce unilateral protection measures. By doing its share to devise these new solutions and have them adopted, Europe will be doing the greatest possible service to the Third World—in the first place because in the world of tomorrow industrial protection measures are likely to be directed first and foremost against new industries and in the second place because, among all the conditions of the speedy industrialization of the Third World that can be enumerated, by far the most important is the maintenance, in the world as a whole, of the expansionist trend which mankind has been enjoying since the end of the last war and which must be made at all costs to continue.

THE INDUSTRIALIZATION OF DEVELOPING COUNTRIES: ITS REPERCUSSIONS ON THE COMMUNITY(*)

H. O. VETTER

On the Problems of Industrialization

At the beginning of the second Development Decade the General Assembly of the United Nations made a proclamation calling upon the governments of all countries to adopt measures for promoting a rational system for the international division of labour.

This proclamation was referring to a situation which is regarded as one of the main causes of the economic underdevelopment of the Third World countries, namely, the fact that in today's *system of international division of labour* the developing countries supply the world market primarily with agricultural goods and raw materials, while the production of industrial goods remain a near *monopoly of the developed countries.*

For a host of reasons the developing countries feel that this state of affairs is intolerable. First of all, they look upon it as a perpetuation of colonial dependency.

If one recalls the time when the colonial powers, in order to safeguard raw materials and markets for their growing industry, claimed for themselves a trade monopoly with their overseas "possessions" and prohibited the setting up of factories in these areas, it is understandable that the developing countries, amid today's market structure, get the impression that outside of formal political independence nothing has changed in their relations with the industrial countries.

It is not only supposed or actual dependence of developing countries on industrial nations that provokes a demand for changing today's world market structure. A second reason stems from the fact that the developing countries see the market disposal of their products endangered. Due to the little elasticity in the demand for agricultural products restraints are put on efforts to expand these goods. Conversely, the replacement of certain raw materials with synthetic industrial products by the industrial countries to help to reduce their dependency on their suppliers constitutes a grave threat to the developing countries who export these particular raw materials.

Finally, in this connection, the much discussed problem of the deterioration of the terms of trade must be mentioned. It is not the place here to go into a

(*) Translated from the German

definitive answer to the question whether the trend of prices for industrial goods and raw materials really denotes an ever-widening rift or whether still more criteria must be assessed. As I see it, however, it can be claimed that trade today between the industrial nations and the Third World countries represents an unequal and moreover adverse exchange for the latter.

From this appraisal of the impaired position of the developing countries in the world market arose the concept that their situation must be improved by diversifying the products they supply; through intensive industrialization these countries should be enabled to export industrial projects. Industrialization thus became one of the focal points of every development programme; in fact, many governments pushed industrialization so much that in other economic sectors, especially agriculture, it caused greater detriment.

For us, industrialization cannot be the ultimate goal of development policy. On a previous occasion, I have stressed that from the trade unionist standpoint the development in the Third World emerges as the process of emancipating mankind from the natural, economic and cultural constraints as well as the dependence on social policy. If we approve of the industrialization of the developing countries, then it is above all because we can see via industrialization and its consequent creation of new employment a possible solution to a problem which the ICFTU has repeatedly indicated as a top priority: the problem of unemployment.

The Development Policy of the European Community

The six countries of the EEC have declared that, beside the aid which they are granting as individuals to certain developing countries, they are ready as a Community to contribute to the development of the Third World. This readiness takes practical shape in a series of Conventions:

(i) The Yaoundé Convention with the Associated African States and Madagascar (AASM).
(ii) The Arusha Convention with the three East African States—Kenya, Uganda and Tanzania.
(iii) The Association Convention with Nigeria and several countries in the Mediterranean area: Morocco, Tunisia, Lebanon, etc.

The Commission of the EEC, however, had to state in its Memorandum of 27 July 1971, that a Community policy had not as yet been formulated. The Commission mentioned the risks of confusion over cooperation in development policy, because the Community trade policy is established while technical and financial cooperation are still under the jurisdiction of individual Member States.

The Association of the AASM

If one examines the development of cooperation by the Community with the developing countries, these shortcomings become understandable.

Certainly the first Association Treaty in 1958 was born of the need to find a special regulation for the then colonies of EEC Members (France and Belgium). In accordance with Part IV of the Treaty of Rome, these territories were associated with the newly founded Economic Community. On gaining independence the new states, with few exceptions (Guinea) expressed the wish to remain associated with the Community; so in 1963, on expiry of the first Treaty, the Yaoundé Convention was signed (Yaoundé I) and again on expiry in 1969 the second Yaoundé Convention.

The aim of the Association Policy follows from Article 131 of the EEC Treaty: "Aim of Association is the promotion of economic and social development in the (overseas) countries and territories... Association is primarily to serve the interests of the inhabitants of these countries and territories and promote their well-being, in order to meet their aspirations for economic, social and cultural development". In the first Yaoundé Convention, the allusion to industrialization is much more direct. It speaks of the "diversification of the economy and industrialization of the associated states with regard to consolidating their economic balance and economic independence"

The EEC cooperation on development policy turns on two pivot points

(i) Organization of an immense area with maximum freedom of movement to ensure markets for the Associated Countries.
(ii) Grants of financial aid for the urgently-needed investments.

Expansion of the Markets

The Yaoundé Convention moreover favours the further development of trade between the EEC and the Associated African States and Madagascar (AASM), but also conforms with the intentions of the contracted parties towards promoting trade relations with Inner Africa and international cooperation. So the AASM countries can maintain or set up customs unions or free-trade areas and negotiate treaties for economic cooperation, both between one another and with third countries. Moreover, for the promotion of Inner African trade relations, the most-favoured-nation clause was restricted insofar as the Associated States, in setting up customs unions or free-trade areas, are not bound to extend to the EEC the advantages which they grant to other developing countries.

The European Development Fund

The financial policy instrument of the Association is the European Development Fund (EDF). The means earmarked will be given as non-repayable grants to economic and social investments, if these projects serve the development of infrastructure in the Associated Countries. The amount of the non-repayable grants was:

For the 1st Fund for 5 years up to 581 million Dollars (1958-1963) (Rome Treaty)
For the 2nd Fund for 5 years up to 730 million Dollars (1964-1969) (Yaoundé I)
For the 3rd Fund for 4 years up to 900 million Dollars (from 1.1.1971) (Yaoundé II).

With these means projects are financed, which are submitted by the relevant government and which as far as possible can be interpolated within a global development programme. But in the event relatively few industrialization plans have been put forward. Therefore, the EDF has managed to intervene directly in production structure only in agriculture and the social sphere. Industrialization on the contrary remains in future primarily in the hands of the private economy—a point I will investigate further.

The European Investment Bank

The European Investment Bank (EIB) came into being with the Treaty of Rome in order to assist the balanced and smooth development of the Common Market in the interests of the Community: In the early years of its life from 1958 to 1962 the Bank concentrated its whole activity on the granting of loans to the Member States of the EEC. It is quoted in Article 18 of the Bank's charter that: "The Bank can . . . also grant loans for investment schemes, which are to be implemented wholly or partly outside the European territories". This definition is applied within the framework of the Association Conventions, which provide for financial aid from the Community. Within the first Yaoundé Convention the EIB were able to grant standard loans up to an amount of 70 million Dollars; with the second Yaoundé Convention the sum was raised to 100 million Dollars.

Cooperation with Developing Countries

The conclusion of the Treaty of Rome provoked criticism throughout the world. The remaining countries trading with the Six were afraid of losing this big market. There was talk, especially in the USA, of protectionism.

But criticism from the developing countries was also loud. In particular, the Latin-American States protested against the preference shown to the African Associated Countries. So the Community was faced with the task of striking a balance between its policies towards EASM countries and the rest of the developing nations.

Initially, this came to pass through further Association Treaties, as for instance with the three East African countries Kenya, Uganda and Tanzania, within the Arusha Treaty 1968; and with a series of countries in the Mediterranean area: Morocco, Tunisia, Lebanon, Turkey and Greece.

Customs Preferences

As a supplement to its policy of cooperation with individual countries or groups of nations within conventions, which did have a rather exclusive character, the Community was anxious to promote worldwide measures which would be generally equitable with the interests of the Third World. This happened particularly within the function of UNCTAD, where two problems stand out:

(i) The stabilization of raw material prices
(ii) The facilitation of imports of semi and fully-finished industrial products from the developing countries.

But the solution of both these problems points up different degrees of difficulty; for while in the first case a re-organization of the raw material world market involving the assent of all raw material buyers (primarily the industrial countries) is necessary, it is still left to each nation to open her market to imports if she has no fear of endangering her own industry.

First among the industrial countries the six members of the EEC decided early last year to grant the developing countries customs on their semi and fully-finished goods. These were applied from 1 July 1971. Except for the AASM group, who with reason feared these overall preferences, since they must now reckon with keener competition for the European market, the developing countries reacted positively to this decision. The Latin-American States particularly welcomed this step, all the more when in August 1971 the President of the USA announced the introduction of a 10% import tax. The Secretary General of UNCTAD also expressed his approval and the wish that other industrial countries would follow this example.

Despite these positive echoes, the granting of customs preferences must not be overvalued; for it cannot be claimed that the Community countries have altogether selflessly considered the interests of the developing countries. The import of semi and finished products from the Third World is certainly not

possible on an unlimited scale and the restrictions are aimed at limiting the preferences in areas where some of the developing countries have reached a certain competitive level or where serious disturbance of the home industry is imminent.

The Problems of Foreign Investments

In connection with the question of customs preferences, we must investigate a problem which in the discussions on the development policies of certain countries of the Third World has become very controversial; namely, the investments by foreign private entrepreneurs. I have already mentioned that the means provided by the EDF are primarily applied to projects serving the development of infrastructure, while the build-up of industry itself is primarily left to the private economy. If we speak of private economy here, it must be understood that due to the lack of capital in the developing countries, we are dealing here first of all with private foreign entrepreneurs. This means therefore that granting customs preferences to the semi and finished industrial products from the Third World countries often falls to the advantage of the industrial entrepreneurs from the industrial countries who have invested in the developing countries. A similar case occurs, if a group of developing countries create a joint regional market, as for instance, in the five nations of the Central American Common Market, and then foreign entrepreneurs—in this case North Americans and Mexicans as well—invest in one of these countries, so that they not only get round the tariff walls but even enjoy protection by tariffs and the advantages which were anticipated for the new investments.

Such remarks bring up the question as to how the investments of private, foreign entrepreneurs are to be judged from the viewpoint of aid to the Third World countries.

From the angle of the industrial countries, these private investments are mostly regarded as a form of aid to development. But many developing countries think otherwise; they see a twofold danger here in that through the domination of the economy by the big international undertakings the government loses control of the country's economic development and is no longer able to carry out its own development policy. Secondly, in the free transfer of profits to the home state of the foreign entrepreneur they see a heavy loss for their own economy.

It is interesting to note that the private investors rather shared the opinion of the developing countries. In the 1970 hearing session of the Bundestag, the entrepreneurial camp emphatically declared that economic activity abroad and thus also in the developing countries had originally absolutely nothing to do with development aid. Entrepreneurial motivation is clearly and distinctly

commercial and the future role of the economy is seen in the intention of the enterprises to make profits even in the developing countries.

The positive effects of foreign investments and their commercial and profit-oriented motivation were in no way contradictory in themselves. Although they are indicated in the statistics on private contributions to developing countries solely by the amount of the transferred capital, their special worth lay in the bringing over of values not directly expressed in terms of money; namely, production and management experience, assistance in training and spurs to research and development.

With this qualification of the importance of capital transfers into Third World countries, the importance of their re-transfer is also certainly qualified. This takes the wind out of the sails of the developing countries' argument that transfer of profits would represent a sacrifice for them

Many governments today are trying to limit the transfer of profits and want to oblige the foreign entrepreneurs to reinvest a proportion of their profits These measures are provoking loud protests both from the entrepreneurs and the governments of the industrial countries in sympathy with them.

Up to now the five members of the so-called Andes Pact (Columbia, Ecuador, Peru, Bolivia and Chile) have formulated the most logical and systematic policy towards foreign entrepreneurs. In the charter for the joint treatment of foreign capital which they ratified early last year, the conditions for investment by foreigners in their countries are laid down. In the preamble the importance of foreign capital for development is recognized and welcomed insofar as it conforms with the adopted rules attuned to the economic goals of the countries and so observes their real interests. Then the conditions are stated. They cover three all-important points:

(i) the sectors where investments may be made
(ii) to what extent the national investors must participate
(iii) the proportion of the profits that must be re-invested

These measures were very sharply criticized at the outset: the governments of the developing countries should be allowed so much autonomy that they can implement the policies which they see as right for the development of their country and should not have forced on them any models which may have proved themselves elsewhere.

Summary

In trying to summarize, we can note that from its foundation the EEC was faced with problems in its cooperation with the Third World countries. For

historical and geographical reasons the crucial items in the EEC's activities on development policy (the Associations) cover a relatively narrow field. But the EEC is anxious to adopt (customs preferences) or promote (raw material agreements) measures which generally match up with the interests of the Third World.

The need for formulating a real Community policy and better coordination of the development policies of the Community and Member States was becoming clearer all the time. The prospective entry of four West European nations into the Community will certainly make coordination even more urgent.

With the enlargement of the Community, the Member States will be obliged not only to harmonize their concepts of development policy but also to reconsider the forms of cooperation with the developing countries.

For when Great Britain enters, the dialogue between the Community and the Associated States must be extended to include the Commonwealth Members. It could also provide an opportunity to answer the fundamental question whether the Community is to retain the regional focus of its development policy or expand its activity to the entire Third World without discrimination or preferences.

The harmonizing of cooperation on development policy is also to occur among the individual governments of the developing countries. I said previously that the industrial countries should not try to foist particular models onto the Third World but must respect their avowed objectives. This is not to mean that all decisions must be accepted.

From a certain South-American country one hears proud reports on the speedy development of her economic growth. These results seem, however, to have been attained at the expense of investments in social infrastructure.

As I see it, this is where the criterion of cooperation should be apparent. For us, development policy is a policy which has as its goal the emancipation of mankind. If the priority question arises of economic growth versus improvement of living conditions, then we take the second choice. If a government neglects such important problems as improvements in income distribution and the employment picture or the expansion of social provisions in favour of economic growth, then its decision is to be respected, but in such circumstances there can be no question of cooperation. However active private entrepreneurs may be, if they see the possibility of reaching the goal of maximizing profits, the policy of the public authorities is to be guided solely by social criteria.

The Role of the Trade Unions

My comments up to now applied to overall problems involved in the cooperation of the EEC with the Third World relative to the industrialization of these countries. These thoughts would be incomplete if we did not touch on a theme especially close to our hearts; namely, the contribution by the free Trade Unions to social progress in the developing countries.

That we should contribute is, as I see it, beyond question, for as I have said earlier, the development in the Third World from the trade union viewpoint appears in parallel with the struggle for free movement of labour movement in the "first world." The question which we must therefore examine is: how can we contribute to the solution of the twentieth century social problem?

It seems to me that this problem must be looked at from two angles: the activity of the trade unions in the developing countries and their activity in the industrial nations.

Trade union action in the developing countries is to aim at an equitable sharing of the burdens of development. To attain this objective the union organizations must strive to wield as much influence as possible on the preparation and execution of development plans so that in the choice of priorities over economic growth or betterment of living conditions, the second option obtains the same valuation as the first. Practically speaking, this means that they must see to it that a just balance is struck between investments aimed at economic growth and those for social infrastructure. In particular, it means investing at the planning stage the effects of the project on social structures and matching the implementation of the projects with appropriate action in the social sphere.

A further task for the trade unions is to foster the participation of the people in formulating development strategy. The contribution by the trade unions to the working out of an overall development plan or the preparation of a single project should not be exhausted by trade union officials simply attending the sessions of the planning authorities and getting a hearing. The trade unions must achieve within their own organization such a level of democratization that individual members are enabled to evolve their own concepts and have their spokesmen advocate these concepts to the appropriate bodies of experts.

So not only is the primary goal of the trade union reached; namely, that the interests of the employee are listened to at the planning stage, but the trade unions also make a solid contribution to the democratization of society in the Third World. The functioning of democracy within the workers' organizations is to serve as a prototype for the structure of other organizations and society as a whole.

In this way, the trade unions can bring it about that the development process will mean a real emancipation of mankind and both as regards the satisfaction of primary needs and the extension of the individual's scope for freedom.

I am quite convinced that from now on very difficult tasks will devolve on the trade unions of the Third World. The difficulties blocking the solution to these problems stem primarily from two characteristic features of society in the developing countries. The first is the very low educational level of these countries where the population still shows a high proportion of illiteracy. The second is the still relatively young and weak industrial sector and consequently the small and inexperienced labour force.

Owing to both these social structure characteristics, it is difficult for the individual worker to formulate and give voice to his own ideas.

The low level of education as well as the lack of scope for comparison aggravates the process of discovering the real causes behind the situation and of finding possible remedies. The choice of the right method for finding an audience for individual wishes is also complicated by inexperience in organization as well as ignorance of social processes.

Against the background of these problems, the question facing the free Trade Unions is how can they best help their colleagues in the development countries. If we try to boil down the tasks of the trade unions to a simple formula, then we can say that it is all important for them to formulate and express specific concepts and furthermore at all levels of the labour organizations and society as a whole.

It certainly cannot be our aim to take one of these tasks away from them. We cannot force any concepts upon them for apart from the fact that they would probably not be readily accepted, these concepts which we developed in our own context can assume quite different values in another society. In the same way, we cannot rob them of expression; this would be an intrusion in the affairs of an organization or state which violates our principles and which would not be accepted anyway.

I should like to describe the activity of the free Trade Unions with the regrettably worn out jingle of "aid to aid oneself". I see this activity in particular as applying to two areas—education structures and in purely trade union work.

With the help of well-chosen measures in the sphere of education and training —and I mean especially adult training—we can, by imparting technical knowledge, enable the individual worker to better his own situation. By means of general knowledge, we can also bring within his reach a better grasp of social contexts and so facilitate the formulation of his own concepts.

By posting trade union consultants to friendly disposed organizations, we can assist them in building up democratic labour organizations without pushing them into accepting any particular models.

The experience which the DGB[1] has gained up to now in implementing these projects testifies that this is the right way.

The contribution to development policy of the free Trade Unions is not exhausted by assistance to the partner organizations of the developing countries. We have to accomplish a further task and what is more, at home. We must note with regret that development aid meets with disapproval in some circles of the population. Through lack of information these critics claim that the contributions spent in the form of aid for the Third World could be better applied to solving problems at home. Here it must be our task to draw attention to the pressing problems of the Third World countries and by appealing to everyone's sense of fellowship awaken an understanding of this important task.

The Structural Changes in the Industrial Countries

I would not like to close this commentary without mentioning a particular matter. The industrialization of the developing countries and the opening up of markets in the industrial nations for these young industries will entail a keener competition in these markets and the economic structure of the industrial states will have to adapt itself to the new division of labour at the world economy level.

The economy of the industrialized countries was already in the past and still is today marked by structural changes. The first one was the industrial revolution which brought with it a massive migration of labour from the agricultural economy. Later the evolution of technology likewise caused movements in labour forces; namely, from the agricultural economy and industry into the field of services, and also within the industrial sectors between branches of different technological levels.

The new World division of labour will also entail mobility and it will be the task of those responsible for social policy in our countries to plan the necessary measures in good time.

First of all, the question should be answered—which branches of industry in the industrial countries are exposed to the strongest competition? The following thoughts could give initial leads:

[1] *Deutsche Gewerkschaftsbund*: The German Confederation of Trade Unions

(1) Since the substitution of imports was always a starting point of industrialization in the developing lands, we may reckon that the consumer goods industry will develop the fastest.
(2) Lack of capital and low wages will probably cause the developing countries to prefer initially labour intensive industries rather than capital intensive industries.
(3) Conversely, in a first stage their low level of technology will handicap the growth of the highly technical industries.

This would mean that through competition from the developing countries initially the enterprises in the consumer industry and the labour intensive, poorly capitalized, scarcely technicalized enterprises are hit. As regards the last group we can say that sooner or later technical progress would have forced the disappearance of these labour intensive, poorly capitalized and scarcely technicalized concerns; to this extent the effects towards industrialization of the Third World on the industry of the highly developed countries can be seen as the speeding up of a process already underway.

This entire evolution, however, must be closely scrutinized and the results of this analysis will serve as a basis for planning the appropriate adjustment measures. In this second phase we will demand the participation of the trade unions for labour is certainly the hardest hit by these processes.

As already mentioned, structural changes bring about labour force mobility which can be considered under different aspects.

The first would be called migration from one sector of the economy to another. These currents already occurring fairly frequently will get stronger. For the worker they bring the necessity of reorientation. To this end measures must be adopted to facilitate an intensive re-education of workers. Re-education will be eased by broader planning of the basic training. Finally, the level of the basic training must be raised so that workers can meet the ever-growing demands of modern industry resulting from technological advance.

Alongside training policy measures, others on social policy are to be anticipated. Mobility of labour can also entail geographical mobility involving whole families. For this reason, not only must a suitable infrastructure be created which will allow for the increasing geographical movement, but by reforming the Social Fund means must be made available which are necessary to alleviate social needs. Finally, we shall have to reckon with an increase in the early retirement of older workers, a fact that social policy decisions will also necessitate.

The industrialization of the Third World is not simply a question of economic growth in underdeveloped countries. The new division of labour brought about by industrialization entails a change of social structures, both in the industrial

nations and the development countries, a change which raises a whole series of social problems.

I am convinced that the trade union organizations must see here an enlargement of their task area and that they must do all in their power working together with entrepreneurs and the State to parry the negative effects of this social evoluion.

Appendix added to the report by the author, after the conference

Ladies and Gentlemen,
Initially, the European Federation of Free Trade Unions cast a rather critical eye on the idea of this conference on, "Industry and Society in the European Community," since we feared the disillusionment of having involved brainwork, political stands, a mountain of paper and a lot of money in the Community without achieving any lasting effect. We shall see. At all events, our own case for taking action, and even more the Commission's, will be strengthened. My brief oral comments this afternoon are concerned on a far more practical level with facts and requirements supplementing my written contribution.

From a trade-union point of view, the development of the Third World appears as a process of freeing man from natural, economic and cultural constraints and also social dependence—similar to the labour movement's fight for freedom in our own area.

For this reason, we consider the industrialization of the developing countries not to be a goal in itself but rather one means among others towards bridging the existing gulf between North and South.

Before putting forward some ideas on the form of our relationships with the countries of Africa, Asia and Latin America from a union standpoint, I want to avoid the error observed in so many discussions of development policy, namely, that of allowing the future to obscure the present and past. We should not overlook what has happened in the European Community since 1958.

In *Article 131 of the EEC Treaty* and in the various agreements it has signed, the Community has acknowledged its obligation towards the developing countries and expressly declared its intention of promoting their economic, social and cultural expansion.

One of the aims of the signatories to the second Yaoundé Agreement is to strengthen the economic structure and independence of the Associated States and further their industrialization.

The general obligation has certainly been acknowledged, but it is also true

that the EEC's measures of assistance have largely been concentrated on the "Associated States", whose population only constitutes 5 % of the people of the Third World. An initial step towards changing this was the introduction of the system of general preferences for imports from the developing countries as from 1 July 1971.

What success has really been achieved in the Associated States?

According to Community figures, these countries' external trade with the European Community has expanded at a relatively worse rate than that of the non-associated developing countries.

The five raw materials, namely, copper, wood, coffee, cocoa and groundnuts, still account for just under 60 % of the exports of the Associated African States and Madagascar to the EEC.

Although only 5 % of EEC exports go to the Associated African States, about 65 % of these countries' exports go to the EEC.

According to the Commission of the European Communities study dated July 1971, the number of persons employed in the manufacturing industries of the Associated States is at the most 0.3 % of the population. Exceptions are Gaboon with over 2 %, Zaire with 1.5 %, the Ivory Coast with 0.7 % and Madagascar with 0.5 %.

This suggests that neither industrialization nor diversification have taken place. It must be assumed from these figures that real progress which can be attributed to the special collaboration and association with the European Community is the economic development of these states, as aimed at, has not been achieved.

Even if development from a social policy standpoint, for whatever reasons, is still not stated as an express aim in the Treaties, we should nevertheless bear in mind that there is no such thing as non-political aids to development.

In this connection Gunnar Myrdal said: "We should first of all be quite clear in our own minds that a "neutral" attitude towards the problems of the underdeveloped countries on the part of the developed countries is not a possible option. We are not neutral, nor can we be neutral; even if there were no aid policy this fact would not be altered."

However, our obligations lie precisely in the socio-political area, and it is here that the possibilities and opportunities for projecting the image of the European Communities in the Associated States and the "Third World" are to be found.

In concrete terms: We must not become the tools of those who happen to be in power through our system of collaboration.

Development inevitably involves changes and changes naturally clash with traditional structures and codes of behaviour. Development means change: the older the country, the more radical such changes must be. An underlying principle of the union movement says that *the interests of the majority of the population must determine development.*

Today nine out of eighteen Associated African States are under military regimes, in only two out of eighteen are there opposition parties in parliament and only in a few does a union movement worthy of the name exist.

I have already pointed out that no social-policy measures are mentioned among the European Communities' instruments of development policy.

It is high time for the European Communities too, first and foremost and in collaboration with the Associated African States, to perform an exhaustive analysis of its work in the field of development over the last fourteen years, so as to formulate from this analysis a concept for a development policy—a concept laying down the aims and underlying principles of the Community development policy as part of the "international strategy" for the United Nations *second ten-year development plan which is recognized by all members* of the European Communities.

Such a discussion of the principles underlying the activities of the European Development Fund will be unavoidable in the context of the imminent enlargement of the European Communities.

We should be aware in this discussion that through their concept of a development policy the European Communities have the opportunity of emerging in all the world's developing countries as not only an economic community but as the promotor of a political idea of the social and democratic constitutional state.

The aim of the EEC's aid to the Associated States, namely, to further economic, social and cultural development in the interests of the inhabitants of these nations should be extended to embrace the joint development policy for all developing countries.

A development policy of this type cannot be pursued in isolation: rather must it form an integral part of the Community's overall policy and be given due weight within the framework of the industrial, structural, agricultural, social, monetary and regional policies, i.e., in accordance with our political, cultural, social and economic potential.

Finally and in particular, emphasis must be laid on more vigorous promotion of the social aspect of development.

The primary aim must be to produce direct effects from the development measures on the mass of the population—an aim which has, in the view of the European Unions received insufficient attention to date.

No doubt increasing importance will be attached to the measures promoting industry in the developing countries and aimed at their industrialization.

However, the raising of the standard of living and thus the laying-down of a basis for a home market, the development of the agricultural sector, improved infrastructures, education and the dismantling of trade barriers do not come second in importance to industrialization. Many of these measures are essential prerequisites for the setting-up of industry. Direct measures for raising the living standards of the population should thus become an integral component of the European Community's range of development-policy instruments.

Development policy is out of the question if this disregards the social gulf between the impoverished mass of the population and a numerically small but wealthy upper stratum of society.

A steady growth in earned income, together with stability of employment, must be regarded as the main driving force behind any development. This would diminish social tensions and make it possible to create a home market, which in turn would form the cornerstone of further economic development.

Housing programmes and the promotion of labour-intensive methods on the one hand, and the restriction of capital-intensive methods to economically justified cases on the other hand should be stimulated by the European Community as part of the programme of collaboration with the developing countries. Developing countries wishing to regulate population growth via family-planning campaigns deserve our support. Moreover, we will soon be faced with the problem of dealing with the increasing overspill of surplus population from the states peripheral to the EEC.

But to return to the actual developing countries. Special attention must be paid to the standard of living in rural areas. A way must be found to enable the rural population to share in the flow of money in order to provide powerful stimuli to the market and industrial process.

The majority of the population of the developing countries, and particularly of the Associated States will also be engaged in agriculture after 1985. The productivity of this sector of the economy and the incomes of those employed in it must be raised. We cannot close our eyes to the outmoded structures in this sector which are to be found in many developing countries. A reorganization of the distribution of property which takes account of the interests of both the agricultural workers and small farmers should also be backed by the industrial nations. The setting-up of social institutions and support for handi-

crafts and small businesses in rural areas should go hand in hand with measures aimed at agricultural-produce diversification and improved produce *marketing.*

The international trade between the EEC and the developing countries, which includes capital movements as well as the trade in commodities, no doubt constitutes a prerequisite for the industrialization of the developing nations, but the desired effect must be consciously achieved and controlled. In the long term the agricultural sector cannot be excluded from this process.

The advantages of foreign private investment in developing countries as an effective step towards their industrialization were pointed out by the previous speaker. But what in most cases is seen to be the true state of affairs?

1. The low wages, inadequate social laws and outmoded labour laws in the developing countries are exploited by the investors.
2. *Investments are too often concentrated in the highly profitable sectors of* the economy, e.g., luxury goods subject to high import duties, without taking account of these countries' development aims and priorities.
3. *The untrammelled collaboration with the frequently reactionary and cor*rupt upper classes in some countries prevents necessary reforms from being carried out.
   The need for the involvement of the native population in the management and administration of undertakings and the creation of jobs goes unheeded.
4. The tightening of the environment-protection regulations in the industrial nations leads to a transfer of industry to the developing countries without thought for the consequences to these countries.

As a result of the assistance measures on the part of the industrialized nations and the special concessions made by the developing countries to private investment, coupled with the overvalued currencies in most of the developing countries, capital costs are artificially lowered, i.e., capital-intensive manufacturing methods are cheaper. If the shortage of capital in the developing countries is taken into account, it emerges that all these special concessions, and also the preferential customs tariffs on semi-finished and finished products from the developing countries, operate to the benefit of the entrepreneurs from the *industrialized nations who invest in the* developing countries.

However, there is no guarantee whatsoever that the desired effect of these *investments as regards development policy* will be achieved. For this reason the unions are opposed to subsidies, tax concessions and guarantees to private investments or transfers of industry to developing countries where these are granted without stringent requirements with respect to development policy being attached. One of these requirements should be that the recommendations and resolutions of the International Labour Organization concerning working conditions and social security for workers should be adhered to, even if the

developing country in question is not a signatory to these recommendations and resolutions. It is intolerable that companies accepting worker participation and co-management in our countries prevent the formation of a trade union in a developing country.

Let us in conclusion turn to the consequences experienced by industries in the Community, since many of the problems besetting the developing countries can only be solved in the industrialized nations themselves. Structural adaptation in the European Community is inevitable, but the Community is not in a position to make these efforts alone and in isolation from the other industrialized nations. Here too, then, the European Community should take the initiative as regards joint action here, after having made a courageous start by introducing general trade preferences. On the unions' side, however, we would like to make one point clear from the outset: the full brunt of this new industrial policy must be borne jointly and not by the clothing, ceramics and footwear industries alone and not by the employees in these sectors of industry. Structural changes have repercussions on employees and for this reason adaptive measures cannot be planned and implemented without the participation of the labour force.

Since most unions in the European countries work in close collaboration with the International Confederation of Free Trade Unions and at the same time the European unions in the Community countries belonging to the ICFTU are associated in the European Federation of Free Trade Unions, extensive participation by both bodies within the European Community and the Associated States would appear to be not only feasible but also imperative.

Structural adaptation cannot be left to the free play of market forces, but must be planned and regulated. Far-sighted planning calls in the first place for comprehensive research in order to assemble the facts and figures required for an industrial and structural policy which is aimed at the future.

Measures for easing the process of adaptation should be instituted, not only for companies, but also for employees. The unions therefore demand participation, even at the research stage.

Only when we have forecasts of the extent of work transfer and job requirements can we foresee the social consequences and introduce guiding measures in good time. The European Social Fund must compensate for any social hardship arising from these structural changes, and particular account should be taken of the interests of the older employees via a special arrangement. The aim of a development policy cannot be to contribute to the development of the AASM at the expense of the social gains obtained by labour in the EEC.

The creation of new jobs, the achievement of greater mobility by setting up a suitable system of education and job-training facilities, and an extension of retraining facilities are necessary supplementary measures. Stimuli and induce-

ments must be offered here. The need for paid leave for training purposes is also borne out in this context. Among the things needed to achieve greater geographical mobility are suitable infrastructures, more vigorous housing programmes and the provision of appropriate leisure and cultural activities.

Let me sum up as follows.

As before, the industrialized countries are making the greater gains from the so-called development aids. The sacrificial attitude adopted so extensively in discussions on development policy has no justification at all! Should the industrialized nations now decide not to make greater efforts and to set up genuine cooperation with the nations of Africa, Asia and Latin America, not only out of moral duty but also because the developing countries have a right to our help, the polarization between the industrialized and the developing nations will be intensified, as has been shown at the UNCTAD conference currently being held in Santiago. The consequences of a polarization of this type are anybody's guess. The European Economic Community is in a position as no other institution is to come out resolutely in favour of an advanced development policy which will determine our future.

PROMOTION OF INDUSTRIALIZATION IN DEVELOPING COUNTRIES; IMPLICATIONS FOR THE COMMUNITY'S INDUSTRIES (*)

J. TINBERGEN

The development the world needs most.

1. An economically strong region may pursue a commercial policy which, through running counter to the interests of the rest of the world, brings prosperity to that region. The theory of international trade uses the concept of "optimum tariff" to indicate the tariff level which such a region would have to maintain in order to maximize its own prosperity. However, so far no one has attempted to calculate this optimum tariff, and it is indeed preferable not to use the concept as a basis for the commercial policy of the EEC, for, if we did, critics arguing that the Community's policy merely favours its own interests,really would be proved right.

It is better to gear our commercial policy to the promotion of world interests. In pursuing this principle, we shall make the Community acceptable to the rest of the world. According to welfare theory, we would then have to try to abolish all restrictions on imports. Only two exceptions would be made under such a policy: 1. Trade rationing under goods agreements for unstable markets; 2. Temporary trade barriers to absorb shocks, also referred to as temporization of the effects of these shocks.

The aim of the optimum development of the world as a whole should be to increase world prosperity to the highest possible level that can be achieved in view of existing natural and technological limitations. Since by far the largest part of the world population is poor by our standards, it may be argued that our objective for the next few decades should be to increase production to its maximum level. In order to avoid a complex discussion on the pros and cons of production increase as against increase of spare time, we will assume that the number of working hours for most people has been fixed, say, at eight working hours per day.

There are other good reasons for aiming at maximum production in the short term: it allows maximum investment and, consequently, maximum growth [4]. In this report, we shall not try to answer the question what rate of development should be chosen because it is still a purely academic question [7]. In defence of our preference for a short-term policy of maximizing production, we may add that the structural changes proposed below will redound to the benefit of developed as well as developing countries.

2. Given the limitations imposed by nature and technology, the maximum production level may be reached when all factors of production are fully utilized. Economists usually recognize three factors of production: nature, labour and capital. "Nature" is considered to comprise mainly land and its mineral resources, as well as the climate and location of a country, including

(*) Translated from the Dutch.

natural waterways. In the present report, "labour" will refer to unskilled labour. Persons who have acquired a certain skill, training or experience will be considered as a combination of labour and "human capital," in which the latter term indicates the value of efforts made in the past to acquire training or schooling. The other component of "capital" as a factor of production consists of stocks of man-made products that may be used for future production. Both types of capital will normally be expressed in the form of an amount of money, e.g. in dollars, with the purchasing power which that amount represented in an arbitrarily chosen period and country.

With the aid of the factors of production a large number of production processes may be carried out; each country will have to select a certain number from all these processes. To this end, part of the available "capital" and "labour" will have to be moved; "nature" cannot be moved. For our purpose, we will assume that the necessary mobility of labour and capital is bounded by certain limits, not too different from existing limits but possibly twice these. In the case of capital, this means that we do not exclude the possibility of a flow of capital (of both kinds) twice the size of the present flow, if this helps to avoid a situation whereby part of the labour available would remain unused. For the same reason, we shall also assume that the number of foreign workers may be twice the present number. "Foreign workers" will also include experts and volunteers.

3. As regards the production processes that are possible, we shall make the following assumptions. Certain dissimilar production processes lead to identical products. All processes which produce one category of products will be considered as alternative production methods of one and the same branch of industry. A number of branches of activity will be designated as national or immobile and the others as international or mobile.

Immobile branches have one of the three following characteristics:

(a) they use natural resources as one of the factors of production;
(b) their products cannot be imported or exported by a country because the costs of transport or communications are too high for it or
(c) because the costs of transport or communications are too high for the consumers of the products.

Branches of activity coming under (a) are primary branches (agriculture and mining), but only in the very first stage, excluding the processing stage. In principle, processing may take place elsewhere, that is to say as long as the primary product, per unit of output, is not too heavy.

Branches of activity coming under (b) include the building industry and the production of goods which are very heavy per unit of output referred to under (a).

Category (c) includes a large number of services, e.g. those supplied by the retail trade, primary and secondary education, and a large part of further

education. This category also comprises services supplied by the governm and lower public authorities and a number of personal services such as th supplied by barbers, domestic servants, etc. For cultural and political reaso these services are often supplied by citizens of one's own country.

The exploitation of branches coming under (b) and (c) should, for the veloping countries, be as labour-intensive as possible. Since there is no int national competition in this case, it is not necessary to increase labc productivity by mechanization.

The national branches of activity mentioned under (a) can only survive they can compete on the world market. Their ability to compete deper primarily on natural factors and only to a small extent on the produce income. Besides, many of the branches mentioned are characterized by u stable markets; for this reason, it is advisable for them to conclude commod agreements for their products.

4. As regards international branches of activity, a distinction must be ma between branches with production methods with varying degrees of labc intensity and branches with only one process. For the former, it is advisab in view of the wide spread unemployment in the world at large, to use th most labour-intensive processes. These processes, and those of activities th have no alternatives, may be eligible for international division of labour. T total quantities of capital available to the countries of the world must, in t short term, be considered as a fixed datum, with due regard to the transfer part of the capital from relatively wealthy countries to poor ones. With the a of these fixed quantities of capital, maximum production will be achieved they are combined in the selected production processes with as large a quan ty of the available labour as possible. This means that, generally speakir labour-intensive international industries will have to be established in po countries and capital-intensive industries in more prosperous countries. order to get a first general view of the problem, B. Herman, in conjuncti with the author of the present report, has made an estimate of the distributi of industries over the countries of the world [6]. Account was taken of t fact that a certain degree of diversification in the production pattern of ea country is desirable. This principle has been worked out in the above study dividing countries and branches of activity into categories, eleven altogeth ranging from the countries with the smallest quantity of capital per head of t population to those with the largest quantities, and from the highly labou intensive to the most capital-intensive branches of industry. In addition, ea group of countries could choose from a number of branches so as to accompli a sufficient degree of diversification. It should be clear, however, that the us fulness of diversification should not be overrated. Indeed, if the principle diversification is carried out to such an extent that each country possesses a branches of industry, the advantages of international trade will no longer appl

In the study mentioned above, the data on labour-intensity in the branch examined were normally based on Swedish production statistics (for 69 bra ches), and on German or Japanese statistics (19 branches) if the branc

in question proved to be more labour-intensive in Germany or Japan than in Sweden. The calculation of human capital took the form of a rough estimate a distinction was made only between qualified and less qualified labour in which qualified labour was defined, for the industries under discussion, as managers, technicians and other specialists. The representation of qualified labour in the population of various countries was defined in accordance with major groups 0 and 1 of the International Standard Classification of Occupations, which contains almost identical definitions. The group less qualified workers consisted, for the branches discussed, of office personnel and manual workers (white-collar and blue-collar workers) and, as regards their representation in the national population, of groups, 2, 3, 7 and X of the Standard Classification.

The study was to provide a first general view and was intended as a challenge to others doing research in this field to try and compile more exact figures? More specific data are at the moment being worked out by the Netherlands Institute for Economics. On the basis of available statistics on trade, for instance, the mobility of all products marketed has been calculated. The findings confirmed the assumptions that had served as the basis for the subdivision into mobile and immobile branches of industry [5]. At the same time, a more exact method is being designed to calculate the amount of human capital used by each branch per unit of value of the product. Further improvements in calculation methods will cover the following aspects. The pattern of the demand for finished products, which in the study referred to above was assumed to be congruent with the pattern of Swedish demand, is calculated according to a different method. Account is also taken of the fact that an international industry cannot function properly without a parallel production increase of a number of national industries such as energy and transport. The method applied here is known as the "semi-input-output method" [3].

A more exact method of calculating human capital has been worked out by the Institute of International Economics of the University of Kiel, though for more aggregate branches of industry (29 branches) In addition, in this report the value added per person employed has been calculated for 12 different countries. All estimates mentioned agree that clothing, footwear and textiles are produced under more labour-intensive conditions than the average for all branches, whereas the chemical and the major part of metal industries are above the average level of capital intensity. The conclusions from the figures calculated in the above report are practically identical with those of the report compiled by B. Herman. They also show that the income elasticities of clothing and footwear in countries with an annual income level of less than $ 1 000 per person are greater than 1, involving therefore a relatively rapid increase of domestic demand.

One of the implications of these findings is that world prosperity will benefit from a further transfer of labour-intensive branches to developing countries. In other words, if poor countries were enabled to export larger quantities of their labour-intensive products, they would earn more foreign currency; they would

undoubtedly use the money to buy chemical and metal products from developed countries and this would then create more jobs in those sectors. This shift would probably lead to an overall decrease in opportunities for employment in the rich countries, but the income per person employed would go up and make it possible to reduce working hours which, in turn, would make it possible to spread opportunities for employment. Consumers would also benefit by such measures (page 802, 3).

5. It is often argued that the industries *suitable for developing countries* should include those in which their own natural products are processed. This is partly true, but not for all cases. If the operation of such processing industries requires large quantities of capital, it may be wondered whether these branches ensure an optimum use of the scarce capital available. Each case will have to be considered separately with the aid of more detailed calculations. An important factor here is the level of transport costs of raw materials, and of transport costs of semi-finished products and finished products that can be manufactured from these raw materials. In general it is true to say that, the more far-reaching the processing, the lower the level of capital intensity of the necessary production processes. This is one of the reasons why it may sometimes be better for a developing country to replace the import of finished products by *its own production* of the same product rather than continue the *partial processing of natural products* obtained from local resources.

The processing by developing countries of their own raw materials is hampered, for instance, by the structure of rich countries' import duties; these duties are higher for semi-finished products than for raw materials and higher for finished products than for semi-finished products ("anti-processing structure of import duties"). This structure will have to be modified. Incidentally, the replacement of imports is more important for big countries than for small countries because in the latter the market is often too limited to justify the establishment of an undertaking of optimum size. A solution may be found in subregional cooperation (page 795, 2).

6. In general, new industries in developing countries need to be protected in the first few years; this rule is now generally recognized. As we have already argued, it cannot be applied to prosperous countries. Protection may also be replaced by subsidies. A system of subsidies can be defined on economic grounds as long as market prices of unskilled labour in developing countries exceed the "real prices" reflecting the actual abundance of unskilled labour. Subsidies equal to the difference between the two prices are economically healthy because they lead to more realistic price levels consonant with the principle of real costs.

In the interests of all those involved, protective measures should be degressive. This would encourage certain groups of entrepreneurs in developing countries who are now "sitting pretty" to make greater efforts at modernizing the structure of their enterprises.

It is likewise important that all states should maintain a realistic rate of exchange. In the case of many countries, this would mean devaluation, which would strengthen their competitive position.

Barriers to the industrial development of developing countries

1. Before proceeding to discuss the barriers to the industrial development of developing countries, it should be pointed out that, despite the existence of such barriers, there are trends pointing constantly in the direction we have described. Enterprises in developing countries are often commissioned by western undertakings to carry out certain parts of a production process because the poorer countries can do this labour-intensive work more cheaply. Puerto Rico, Hong Kong and some other countries are already benefiting by such arrangements. More and more firms are moving their establishments bodily to a developing country, to start production there, sometimes in a "joint venture" with a local enterprise of that country. In carrying out their industrialization programmes, developing countries often rightly make a distinction, within one and the same branch of industry, between processes that may be performed in developing countries and others that should be performed elsewhere. The first group includes labour-intensive processes in as far as the market for them is insufficiently large to absorb the optimum quantity, i.e. at minimum costs. The second group includes processes of a complex nature, which therefore require a great deal of skilled labour and for which the demand is too limited to justify the production of the optimum quantity, thus making costs too high for developing countries to bear.

Like a speeded-up film showing the possibilities of development under favourable circumstances, Japan has roughly followed the stages which Chenery [2] derived from comparative studies between countries at various income levels. Some forty years ago, when it could still be considered as an underdeveloped country, Japan started, to the dismay of the older countries, to pursue a powerful exports offensive of textile goods. It has since considerably expanded its industrial pattern, and chances for employment in Japan textile industry are actually diminishing (see Kroese [10]). Japan has already superseded Britain as the world's most important shipbuilding nation. And, over the last few years, India has been increasing its exports of certain types of machine tools.

2. Nevertheless, it is a fact that there are many obstacles to more rapid industrialization in developing countries. First of all, there is a shortage of capital because the low income level does not allow of much private or public saving. The flow of public and private capital to developing countries is countered by a flow in the opposite direction of dividends, interest and repayments. In a number of Latin-American countries, the flow leaving the country exceeds that entering the country, partly as a consequence of earlier loans which

have to be repaid and partly resulting from the flight of the capital of the rich.

Another obstacle to industrialization in developing countries is the lack of technical know-how and the shortage of production managers, reflecting the low quantitative and qualitative levels of education. Nevertheless, various attempts are being made to improve and extend education, e.g. by providing management training courses in western countries, organized by western governments or industries. Some western firms established in developing countries are obliged by the governments of those countries to recruit their supervisory staff partly from the local population, while other firms have found it sensible to pursue such a policy on their own initiative.

A number of developing countries are taking measures tending to make it less attractive, or indeed even very unattractive, for foreign enterprises to establish themselves there. Such measures include nationalization with very low or no compensation, refusal to work in shifts, the introduction of complicated regulations on the import of indispensable components or semi-finished products, and a reduction of the part of the profits that may be transferred abroad. These and similar measures have created what is sometimes referred to as a "bad climate for investment."

Although a certain feeling of irritation towards foreign companies is understandable, and sometimes even justified, it is not in the interest of developing countries to deter such enterprises from making investments. The principle that it is better to go it alone may be all fine, but it means that the population has to make more sacrifices by cutting down on consumption. To improve the "climate", it would be very useful if the governments of developing countries with a mixed socialist and private economic system were clearly to define the sectors which they intend to keep open to foreign investment.

The inefficiency of government administration is partly due to a shortage of well-trained civil servants and the consequent overcentralization of the decision-making machinery. On the other hand, however, there is often much unnecessary duplication of work; some concrete examples of this are found in the Turkish Government's First Five-Year Plan [15].

Another difficulty in the industrialization process, finally, is that the domestic market in developing countries is often too small. This problem may be solved by cooperation between neighbouring countries, for instance by the establishment of a limited customs union under which investments are distributed evenly among the member states. But, it is a well-known fact that such forms of cooperation take a long time to prepare and consequently develop only very slowly.

All these problems are considered in the Development Strategy for the Second

Development Decade [16], adopted by the General Assembly of the United Nations. Evaluation studies for this are now in preparation and will no doubt help in finding adequate solutions.

3. The obstacles to industrial development, however, are in part caused by the developed countries. Since the developed countries have more and better means at their disposal to remove the causes, it is in their own long-term interest to make serious efforts to eliminate or reduce these obstacles.

The most serious obstacle is certainly to be found in the rich countries' import policy. A number of industrial branches in which developing countries could produce more are wrongfully protected by developed countries.

In judging the extent of protection, one must calculate the "effective protection," i.e. calculate the import duties on a certain product not as a percentage of the total value but as a percentage of the value added by the industry in question. A number of figures concerning this effective protection are given in Table I.

TABLE I.

Effective protection, when this amounts to over 10 %, of industry by the Federal Republic of Germany vis-à-vis countries other than EEC Member States

Non-ferrous metal castings	34.1
Mechanical wood pulp and paper	33.3
Non-ferrous metal and intermediates	25.2
Paper and board articles	23.4
Clothing	21.5
Textiles	21.2
Iron and steel	20.2
Fine ceramic products	16.4
Cast iron and steel	15.7
Leather goods	15.5
Wooden articles	15.0
Glass and glassware	14.9
Rubber and asbestos products	13.6
Chemical products	13.2
Shoes	13.2
Wooden articles, processed	11.1
Structural steel work	10.9
Leather	10.1

Source [8], Table 4 b* (p. 8*)

This protection is applied in the knowledge that without it the branches in question would not be able to survive. Lary [11] has pointed out that it is primarily in the labour-intensive branches of industry that most protection is given. The return from the branches is often insufficient despite such protec-

tion. This is illustrated in Table II, which shows some relevant data for the Netherlands [I].

TABLE II.

Average percentage yield in the Netherlands from some branches of activity (1964/8 and 1968 data):

	1964/8	1968
Agriculture, forestry and fishery	6	5
Food industries:		
livestock products	7	6.5
other products	6	5
Beverages and tobacco articles	15.5	14
Textile industry	4	4
Footwear and clothing industry	4	4.5
Paper industry	11.5	10
Chemical industry	17.5	16.5
Oil refineries		11.5
Metal industries	14	11.5
Metalworking and mechanical engineering	10	9
Electrotechnical industry	31.5	29
Transport industry	2	2
Trade	15.5	12.5
Ocean shipping and aviation	3.5	2.5

Source: [1].

It is clear from the above table that the yields from, for instance, the textile, footwear and clothing industries are small. It is somewhat surprising to find that the yield from the transport industry, unlike that from the other metal engineering industries, is also small. This presumably includes shipbuilding, which is also labour-intensive. The preservation of these branches, or at least of large parts of them, is therefore not only a disadvantage for the Netherlands but also prevents the expansion of the branches, or at least of parts of them, in developing countries. Data for the United States lead to similar conclusions (Table III).

TABLE III.

United States. Percentages of profits from equities

	1962	1963	1964	1965	1966	1967	1968	1969
All industry	9.8	10.3	11.6	13.0	13.5	11.7	12.1	11.5
Textile industry	6.2	6.1	8.5	10.8	10.1	7.6	8.8	7.9

Source: [10].

It is noticeable that OECD forecast [12] show little sign of a change in the make-up of industrial production, either because of future changes in the division of labour between developed and developing countries, or because of pollution of the environment.

The protection referred to above also springs from the fear of a reduction in the opportunities for employment which, according to Table IV, does occur continuously.

TABLE IV.

Opportunities for employment in the textile industry (in million persons)

	1950	1960	1968/1969
EEC	2.13	1.88	1.57 (1969)
EFTA	1.29	1.14	0.98 (1969)
Finland and Spain	0.33	0.27	0.25 (1968)
United States	1.26	0.92	1.00 (1969)

The slowness with which the necessary changes are implemented could also be ascribed to a lack of interest among private investors in investments in developing countries.

According to the data of the OECD Development Assistance Committee [14], the total net flow of capital invested in developing countries by private individuals amounts to about $ 6 000 million or 0.34 % of the GNP of developing countries. If we assume that, on the average, about 15 % of the GNP is used for investment, the capital flow to developing countries amounts to only 2 % of investments and possibly 4 % of private investments This situation is probably largely due to the developing countries' less favourable climate for foreign investment. On the other hand, there is also a lack of information and of encouragement by the governments of the wealthy countries.

How could the obstacles be overcome?

1. First of all, active or direct measures may be taken to stimulate industrialization in developing countries. These include all measures taken by governments of developed countries to make investments in developing counties more attractive, such as granting guarantees for certain risks, tax concessions for investments in developing countries, especially for joint ventures, and the transfer of firms to these countries. In recent years, the International Chamber of Commerce has made a number of concrete proposals [9], for

example concerning bilateral treaties to promote international private investments, tax concessions in developing countries, and taxation treaties between developed and developing countries. Although the proposals are naturally made from the standpoint of the business world, they represent a modern, broad outlook.

2. In addition, a number of important national measures are being implemented at the moment in the rich countries which could have a considerable indirect effect. The aim of these measures is to facilitate imports of industrial semi-finished and finished products from developing countries while at the same time encouraging the reorganization of the national economies of developed countries in order to adapt them to the new system of international division of activities.

On 1 July 1971 a system of special preferences for such imports from developing countries came into effect. In order to temporize the increase of imports and facilitate internal adjustment to the new situation, the quantities that may be freely imported are subject to a quota system. For a number of products, imports are exempt from duty up to an amount equal to the 1968 import figures plus 5 % of total imports of the products involved from third countries. These quotas should be extended more rapidly than the present arrangements allow. A desire to temporize an increase of imports should not become a pretext for actually continuing protection. Temporizing measures should be spread out over the minimum period in which adjustment is possible. Hardly any well-founded figures are available on this minimum period. They should be based on the time it takes to adjust the existing machinery to its justified size, i.e. the size which enables the industries to continue competition without protection according to the rules mentioned on page 794, 6. One such rule is the recommendation that each product should be manufactured in the most labour-intensive way that competition allows.

The changeover of American industry after the Second World War may provide us with an indication of the length of the necessary adjustment period. Contrary to expectations, this changeover was effected relatively smoothly.

For entrepreneurs, the most recommendable changeover procedure consists in (a) the transfer of a production process which is no longer competitive to a country with better opportunities for competition (e.g. lower wages) or (b) investing money that has become available from depreciation in other, profitable production processes. Investments in shares of firms with strong competitive capacity could also be considered, even if they specialize in an entirely different form of production.

For employees, apart from normal staff turnover, the best method would be to provide vocational training courses for other occupations in profitable branches of industry or national branches as meant on page 791,3. above. An examina-

tion of the nature of the vacancies and the skills required for them in the form of job classification will help to determine the nature of the training courses. In this respect, the encouragement of geographical mobility will also play an important role. For a small country like the Netherlands, for instance, it has been pointed out that unemployment in the north exceeds the number of jobs available whereas in the west the number of jobs available exceeds unemployment figures (see W.J. van de Woestijne's article in Economisch-Statistische *Berichten* [17]).

Various public services, such as, for instance, public transport and the police force, still have a shortage of personnel.

The objective of government measures to adjust existing industrial structures to the new commercial policy will have to be the encouragement of the establishment and expansion of companies suitable to the EEC because of their capital-intensive nature rather than the provision of aid to branches of industry which, because of their proportionate use of labour and capital, do not *fit in the structure planned for the future.* There is a certain range of capital intensity corresponding to the quantities of labour and capital available in the EEC; the industries to be encouraged should fall within this range or be national branches of industry.[1] As has already been pointed out, strong diversification is not the ideal solution.

Measures to encourage those branches of industry found to be suitable may consist in: information; credit and tax concessions over a limited period, a

[1] *According to the, very provisional, study [6] compiled by* B. Herman and the author of the present report, the following international branches of activity would be most suitable for Western Europe
the production of:
  machines for the textile industry
  equipment for the building and mining industries
  cars
  tractors and wheeled vehicles
  internal combustion engines
  pig iron, iron castings, hot-rolled plate
  alcoholic beverages
  castings and wire
  general purpose lathes
  accumulators and batteries
  certain special textile goods
  washing and sewing machines
  ball bearings, transmission belts
  animal and vegetable oils
  refrigerators, etc.
  water and steam turbines
  radio sets and components
In judging these suggestions it should be borne in mind that, *according to* the above study, the division of labour in the whole world should be intensified, which, in principle, means that the world's needs for the products mentioned would be satisfied by Western Europe. This obviously depends on the willingness of governments in other parts of the world to abolish import duties on these products.

government purchase policy; and a restriction of the regional subsidies policy to the branches coming within the above range.

Steps will have to be taken to ensure that this policy is pursued equally by the various EEC Member States. According to certain business circles there is often a lack of uniformity in the policies of EEC Member States.

3. It is a well known fact that many producer groups exert pressure on their governments to preserve their branches even if this is not in the real interests of the country as a whole. These interests also include those of the consumers, who have an interest in low prices and, consequently, in a reduction or elimination of import duties and other restrictions. A better approach to matters in the public interest would be possible if consumer organizations were stronger and provided clear information on possibilities of price reductions concomitant with the abolition of import duties. At its congress in The Hague on 25-27 October 1971, the Society for International Development appealed to the International Organization of Consumers' Unions, also in The Hague, to devote attention to this aspect of consumer interests as well.

It may be added that consumer interests are still insufficiently defended by organizations and institutions claiming to promote them: cooperatives fail to do so because they represent only a small section of the consumer population; the trade unions because they have to watch over producer interests at the same time; and governments because contacts with organizations of consumers and housewives are maintained only by small sections of the government machinery which, because of the predominance of producer interests represented in various government departments, lack sufficient influence.

4. The countries associated with the EEC may be divided into countries which will ultimately become full members of the Community (Greece and Turkey) and the former colonies of EEC Member States. The first group of countries will in the near future be exempt from paying import duties in the EEC Member States and will therefore be able to benefit fully from the advantages of an international division of labour. For Greece and Turkey this will undoubtedly create new good opportunities for the development of their labour-intensive products such as clothing and shoes.

Most of the former colonies, the Associated States, are situated in Africa, and many of them also belong to the group of least developed countries. Their exports of industrial products are very small and will hardly be affected by the EEC's industrial policy. Their main problem is to improve agricultural production, and the best way of solving it is to provide them with technical assistance. An increase in the export of their products will not involve any difficulties because they are exempt from import duties.

5. Future prospects for all countries have been uncertain ever since research

work carried out by the Massachusetts Institute of Technology has drawn attention to the threats of a rapidly deteriorating environment and a rapid exhaustion of natural resources. This could place the problems we have been discussing concerning the world's development in quite a different light. It is possible that the chemical industry in Europe cannot, for environmental reasons, be expanded beyond a certain limit. Motor vehicle traffic may have to be subjected to drastic restriction. We do not yet know exactly to what extent the most probable restrictions should be implemented. It is certain, however, that the train of thought pursued here concerning the development of the rich and poor countries may be affected by the need for such restrictions. A great deal of research will therefore have to be done in order to give us, as soon as possible, a deeper insight into these aspects of development On the one hand, research is necessary because it may result in providing harmless substitutes for activities which are dangerous. On the other hand, research should help us to ascertain to real range of the technical and demographic possibilities of modern technology and enable us to take these possibilities into account when carrying out existing development plans for Europe and other parts of the world Research priorities, therefore, will become quite different from what they are today. Inventions that may help to reduce human fertility, and others that may lead to a reduction of the pollution or exhaustion of natural resources will occupy a very high place on the new list of priorities. In contrast, lower priority should be given to research projects concerning space travel and projects for the further development of dangerous substances and their raw materials.

Contrary to the research results which have so far been provided by Forrester and Meadows [12], the new objective should be to find the possible development, free from cyclical movement, of a new trend, taking account of existing natural circumstances, and a transition towards that trend with a minimum of sudden rises or falls.

6. *Recommendations.* The following major recommendations may be derived from the previous considerations. The EEC should set itself the following objectives:

(a) A further reduction of import duties on products from developing countries by a gradual but rapid abolition of quotas imposed under the unilateral preferences granted on 1 July 1971;
(b) In those cases where import duties will not yet be abolished, the elimination of the "anti-processing structure" of import duties;
(c) Increased and more positive cooperation in establishing agreements on products, first of all on sugar and cocoa beans;
(d) The encouragement of branches of industry fitting in the range of capital-intensiveness suitable for Western Europe;
(e) The EEC should not encourage activities which can compete on the world market because of their more capital-intensive processes but which could

be replaced by labour-intensive production units capable of manufacturing the same product in developing countries;

(f) Granting high priority to scientific research projects that form an extension cf the research work undertaken by Forrester and Meadows of the MIT on the initiative of the "Club of Rome";

(g) Also granting high priority to improved research on: (a) the branches of industry most suitable for Western Europe, and (b) the minimum period within the present structures may be adapted to effect the changeover thus envisaged.

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THE COMMUNITY IN THE WORLD

Summary by the Chairman of group III Mr I. Le Portz

President of the European Investment Bank

Mr Chairman, Ladies and Gentlemen,

It is difficult to summarize in a few words the proceedings of Group Three: under the general title of "The Community in the World" it covered topics as rich and varied as technological development, the internationalization of firms and the industrialization of the Third World A large number of comments were made—all of them very stimulating. All I can do is to present them in broad outline and, unfortunately, in a very condensed form.

The subject discussed most extensively by group Three was the multinational firm. There is nothing surprising in this, since the commercial company in our society is in a special position, being the place where economic expansion is generated and where social tension come to the surface Improvements in communications and transport, advances in management methods, as well as the very fact of setting-up the Common Market, have inevitably produced of late an unprecedented expansion of international business operations.

Multinational companies, meaning firms that conduct and coordinate operations on a permanent basis in a number of countries, are playing an increasingly important part in our economic and social affairs. All the rapporteurs and speakers from the floor acknowledged that this was a natural development in our existing society, but, at the same time, they pointed to the time-lag between this trend, which transcends national frontiers, and the retention, at national level, of the basic structures of our political and trade-union systems, and they stressed the tensions to which this time-lag will inevitably give rise.

Proceeding from this, the workers' representatives levelled a number of criticisms at these companies, and expressed the deep-seated distrust that they felt in the presence of the possibility that such firms might misuse their power, evade the political requirements of the host countries and thwart the trade unions in the fulfilment of their function, not only as regards wages but also in the more fundamental sense of ensuring genuine involvement of the workers in the moulding of decisions of importance to the very survival of the firm For many of them the least that should be done is the establishment without delay of trade-union structures tailored to this new dimension of economic af-

fairs. To the heads of large firms, on the other hand, the advent and spread of multinational businesses seem to be one of the most powerful factors promoting economic progress. The problem created by them is primarily due to the fact that it is they that are ahead of the other structures. They therefore desire an appropriate updating of the legal, tax and trade-union framework within which firms operate, in order to provide harmony between them and their environment, something now lacking.

The practical suggestions made were chiefly concerned with:

(a) The complete elimination of double taxation and tax discrimination. One way of achieving this might be the establishment of a body for fiscal arbitration at European level.
(b) The development of a true European capital market.
(c) Implementation of economic and monetary union leading as soon as possible to fixed rates of exchange between European currencies.

The heads of multinational companies also emphasized the absolute necessity for these companies to integrate themselves as fully as possible with the host country's structures. They rejected the accusation that they caused prejudice to the interests of these countries; on the contrary, they consider that an objective examination of the facts showed that these firms are particularly concerned to comply with all obligations laid down by—or even mere recommendations from—the host nation's authorities.

As a means of increasing the degree of integration still further, certain of the representatives from the multinationals proposed that more use be made than in the past of such approaches as the setting-up, in the industrialized countries, of subsidiaries which draw lavishly on the capital and management resources available in the host country, and, in overseas countries, of joint ventures in which the State and the local development banks can have a stake. As regards their industrial relations, the representatives from the multinationals stated that they wished to foster dialogue at all levels and wanted the employees' side to build up structures tailored to the conduct of such a dialogue. In that setting it was not impossible to believe that collective agreements might be drawn up and negotiated—at various levels—between trade unions and managements.

All the rapporteurs and speakers from the floor emphasised the absolute need for progress towards the strengthening of European structures, in order to provide bodies which can speak with an authoritative voice—at European level—and also to enable European organizations to negotiate effectively with non-European governments responsible for the supervision of the headquarters of companies operating in Europe. All considered it essential to strengthen these structures in order to ensure that European businesses do not suffer discrimination in their international operations.

Lastly, two fundamental propositions were put forward several times. One was that a firm conducting major operations in several countries cannot achieve a lasting balance unless it brings into its central management team executives from those countries, and that the training of such management staff is an important task for the educational system in Europe today. The second proposition concerns the need to foster the formation of a greater number of "transnational" corporations with genuinely European management and capital, in order to create the necessary counterweights to offset the multinational companies of non-European origin.

Next to the multinational firm, the subject most extensively discussed by Group Three was the industrialization of the developing countries. It was unanimously made clear that the general aim of a fairer distribution of production and prosperity throughout the world implied that the developing countries should be able to industrialize on a sufficient scale.

A number of speakers from the floor pointed out, however, that industrialization is not a panacea, and that it is only one means, albeit an important one, by which these countries could raise their output and standard of living. It was also pointed out that development effort should be directed towards all sectors of the economy, particularly agriculture, whose modernization closely controlled the potential for industrial development in the Third World. When all was said and done, however, it remained true that industrialization was given particular importance by the developing nations, as much for political, psychological and social reasons as on economic grounds, and was objectively necessary if they were to move ahead.

The Community policy on developing countries must be inspired by the aim of encouraging their economic, social and cultural development. Measures to assist these countries should bear directly on their social progress, and precise conditions should be laid down for the granting of advantages to private investment, in order that this may correspond to the requirements for the social development of the recipient countries and conform to the recommendations of the ILO on working conditions and social security.

A certain number of specific recommendations were put forward.

In the field of financial aid to industrialization, emphasis was first placed on the proportion (which it would be hard to replace) accounted for by the injection of private capital when a firm brought the necessary technology to a country, and, concomitantly, stress was also placed on the importance and value of a guarantee on private investments, given not, as now, at national level but at global or Community level. Secondly, the spotlight was focused on the ever-increasing extent to which private credits were used to finance exports; this has often produced benefits, but it contributes towards the rapid and disturbing rise in the indebtedness of the developing countries, and even, on

occasion, towards the setting-up of industries which will make the host country poorer, not richer.

In the field of intellectual aid, two important means of advancing the cause of development were given special mention. The first is the financing, by public aid, of forward studies on investment projects in the industrial field. The second is the extension of vocational training, particularly for technologists and management staff in the host country. In the second area the Community might find an opportunity for action if the European Social Fund were used specifically for the training in Europe of immigrant workers from the developing countries.

Recommendations for action relating to the field of trade, were concerned in particular with the progressive liberalization of the Community's policy on imports, and the gradual extension of the system of generalized preferences to all the developing countries. In this connection, however, it was pointed out that it was important for all the industrialized countries to follow the example set by the Community, which unilaterally instituted such preferences as long ago as 1971. Nevertheless, reservations have now been made with a view to preserving the closer, ties with the African Associated States and Madagascar.

It had been recognized that the industrialization of the Third World was not at a turning point in its history.

It was recognized that the industrialization of the Third World was now at a turning point. The type of industrial plants now being set up in the Third World is now undergoing a radical change. After import-substitution industries and those for processing agricultural produce and minerals (and both classes are subject to inescapable limits), the development of exporting industries, based in particular on the difference in labour costs, now appear a definite possibility. Such industries can only be set up, of course, where the conditions required to secure strict quality control at attractive export prices can be fulfilled. These prospects are probably of more relevance to Asia than to Africa at the present time; but in Africa, too, they appear to be starting to create an avenue leading to highly promising developments, provided that the advanced countries help effectively with their attainment. But development along these lines creates problems for us, the developed countries, problems that have to be faced.

It was recognized that the industrialization of the Third World through the exporting of manufactured goods to the developed countries and the concomitant liberalization of these countries' trade policy could speed up the process of change in the structure of industry in the Community.

Just as it would be hypocrisy to make the adaptation of our internal structures a prior condition to the throwing-open of our markets, so it would be im-

prudent to give all industrial products from the Third World unrestricted entry to European markets without, at the same time, preparing for the necessary changes. As far as this was concerned, two guide-lines were given emphasis. Firstly, the Community should not encourage the overdevelopment in Europe of industrial operations that are too labour-intensive, or of ones that could be competitive on the world market through their capital-intensiveness, when they could equally be set up in the developing countries using a more labour-intensive manufacturing process. Secondly, in order to prevent the workers from footing the bill for the unavoidable structural changes inside the Community, the latter should institute a vocational training policy to promote the mobility of workers between sectors, as well as a social policy through which society as a whole could cover the relocation expenses of individual workers where it is unavoidably necessary that they should move. The workers' organizations must, of course, be fully involved in the formulation of such a policy.

The third subject discussed by Group Three was technological development policy. The discussions—in which a number of philosophies emerged—generally led to the policies pursued in the Community for a number of years being called into question fairly radically.

There was a near consensus of agreement with the view that a technology policy aimed at *attaining Community* self-sufficiency was not viable. The Community, in the eyes of the majority of speakers from the floor, must instead conduct a policy of creating links with the rest of the world and of cooperation based, of course, on substantial efforts of its own in the field of technological development, but without rejecting close collaboration with the rest of the world.

Beyond this agreement on the principle, certain divergent streams of thought were evident on the lines to be followed in the formulation and implementation of a technological development policy in the Community.

According to one view of the prime objective is to develop the practical applications of technology: there is no such thing as technology policy as such, *technology being only* one *aspect, and a tool of industrial,* social and other policies. The essential thing, therefore, is not to set up joint research projects but to identify the major problems of European development policy, and technology's contribution to their solution will follow naturally. As a result, the formulation of sectoral policies can be seen as a prerequisite to any decision on the implementation of Community technological programmes, *and the* same applies with even greater force to the establishment of specialized Community institutions.

To the adherents of this philosophy, the following practical conclusion can be drawn from these basic principles:

(a) The chief incentive to technological innovation is the very establishment of the Common Market, through the elimination of the last remaining obstacles to trade and the free movement of people, improvements to company law, the institution of a European patent, increasing standardization and the internationalization of public contracts.
(b) Specific areas exist, nevertheless, in which a Community policy is needed, although the means of implementing it might vary between sectors. The two most favoured industries are aerospace and computers, owing to the size of the research capabilities involved, which requires the pooling of efforts as part of a coordinated European policy for public procurement. Moreover, cooperation between the public authorities in European countries could be improved, particularly in the realms of transport technology, telecommunications and energy. The Joint Undertaking system proposed by the Commission could be a useful tool here.
(c) In the case of a certain number of intermediate technologies (e.g., materials and corrosion technology) research programmes funded at Community level could prove useful.
(d) The Commission's proposal for the institution of Community industrial development contracts will be of undoubted value in supporting the endeavours of European industry as regards the pre-marketing development of new products and processes. The dissemination of information is essential to the advance of technology; the establishment of the Common Market and the steps already suggested are essential factors in this. In addition, a specific Community-level project should be launched to promote collaboration between documentation centres and, where necessary, the setting-up of specialized centres.

Another view has it that technological research and development constitute a specific area of Community policy, one of key importance if Europe is to overcome the handicaps arising out of its particular situation. The biggest problem is that of determining the goals of such a policy. Two different approaches were suggested. Some believe that the only way of determining these firm objectives is the large-scale application of systems analysis involving the use of advanced mathematical methods, which would be operated by international multidisciplinary teams. The latter must attain a critical mass of several thousand persons, which restricts the number of teams to be formed in Europe.

A certain number of fields already spring to mind as being particularly appropriate subjects for this kind of analysis, namely, the provision of Europe's supplies of raw materials and energy, European communications, and regional planning and development on a European scale. But other, more general fields are perhaps even more important for the future of Europe, especially the determination of medium and long-term collective needs. It is with particular regard to such ambitious objectives, which the proponents of these views regard as fundamental, that the use of multidisciplinary R & D centres may come into its own.

Others consider that economics must be subordinate to politics.

Technical structures cannot be allowed to dominate society, since technical progress has led to an imbalance between individual needs and as yet unsatisfied collective and social needs; Community policy must therefore be *directed to remedying this situation, which results from* the absence of a coherent system of planning.

The Community development policy must have the prior aim of social progress

The Commission's proposals in regard to a Community R & D policy are acceptable insofar as they are adapted to these social requirements. It follows that planning mechanisms and financial instruments must be created at Community level. *Community action may continue in fields in which it already* exists, such as nuclear energy, data transmission, telecommunications, new means of transport, oceanography, meteorology, materials and anti-pollution measures. But other fields should be added, such as town planning and housing, conditions and organization of work. It is also highly desirable to widen Community action in the matter of information and documentation

Mr Chairman, I should not like to conclude this report without placing very special emphasis on the importance attached by all speakers to all facets of what can in general terms be called the overriding need for democracy. All stressed heavily the absolute necessity of placing the indispensable economic *expansion at the service of politics, taking the latter to mean the good of the* Community as defined democratically by the will of its citizens, as well as the equally absolute necessity to avoid our society's being dominated by its technical structures.

Much attention was focused during the discussions on the implications of this principle, in particular:

(a) The ultimate aim of industrial and technical development, both in our Community and in the countries aided by it, namely—and primarily—raising the standard of living of the greatest number and improving the quality of life.
(b) The very aim of development and the technical studies thereon which must apply not only to the means of producing goods and services but also to the infrastructure and to methods of social and human development and, more generally, to the broad forecasting of the future of our society and the determination of the laws governing its evolution.
(c) Strengthening the organizational structures of labour and management, *which is necessary if realistic and* balanced dialogues are to be established.
(d) Lastly, on the Institutions of the Community itself, particularly the structure and working of its informational, consultative, decision-making and supervisory bodies.

In the opinion of all present, only the coordination, at all levels, of the dynamic forces in Europe—in a democratic spirit—will provide relief from the tensions now being aggravated by the higher rate of change demanded by progress, and will enable industry and society to be reconciled for the greatest common good.

Thank you, Mr Chairman.

RÉSUMÉ OF THE WORK DONE AT THE CONFERENCE

S. MANSHOLT
President of the Commission of the European Communities

Mr Chairman, Ladies and Gentlemen,

Mr Chairman, you asked me to wind up the proceedings of the Conference on Industry and Society; I am very happy to have the opportunity of doing so, because I can see what a great success this conference has been. On that account, I should first of all like to congratulate my friend and colleague Altiero Spinelli, for it was from his initiative that this conference sprang; and our gratitude can go out to him, chiefly because he has the merit of putting the most acute problems facing the industrial society into a European setting. I should also like to thank all the eminent rapporteurs who brought the benefit of their experience, knowledge and research to the work of the conference, in a desire to see a more humane society emerge which will give everyone a more even chance and greater happiness. Finally, I wish to thank all those who were responsible for the physical and administrative organization of this conference, not forgetting, of course, our translation services and interpreters.

The great benefit of this conference derives first and foremost from the juxtaposition of ideas in order to draw the necessary conclusions for the Community to act. We must also become aware of the dangers to society from industrialization, and learn how to develop an industrial society capable of both enriching our civilization and contributing to the dignity and happiness of mankind throughout the world, especially in the poor areas of the world, that is to say, the developing countries.

Arriving from Santiago, where I attended the UNCTAD conference, and now finding myself confronted with the problems of industry, I feel that I have two different worlds before me, but in fact the problems are closely intertwined if not similar. At Santiago, distrust towards the industrialized world was expressed, but so was the hope for a society with a greater sense of responsibility and human togetherness. Here at Venice, disquiet about environmental degradation is evident and, as at Santiago, we are interested in the promotion of industrialization in the developing countries.

It is very important that the Conference on Industry and Society has been held at a point in time when the Community is about to be transformed into one of Ten, which will not be the same as the Community of Six. We still have to formulate common policies in the economic and monetary fields, regional development, the environment, which is increasingly threatened, and our relations with non-member countries, without forgetting the place of man, be it in society or in the firm.

In all these fields we must develop a policy bearing the hallmark of European civilization and capable of providing an example to the whole world.

Since the Treaties came into force, the Communities have directed most of their activities to growth, which, as you will know, has occasionally dangerous consequences. As the summit conference approaches, we should ask ourselves about the sharing of the growth that we enjoy, and its distribution between regions or between rich and poor countries. Let me say, speaking on behalf of the Commission of the European Communities, that we shall study the results of the exchange of views that has taken place at this conference; I hope that we shall be able to reach certain conclusions and to submit them to the Heads of State when they meet at the summit conference.

Furthermore, an important problem—and one of the most difficult ones—is that of the worker and his environment. I read Mr Houthuys' report attentively, and when he says that "the work of workers is one of the reasons—and a more than sufficient reason—for conferring on them the right to have a say in decision-making", and, on pages 170 and 171: "Only by workers' participation can free enterprise be saved. Conversely there is no valid solution for the worker apart from participation in the firm:" there, summed up in a few words, is the great task for the future. It is still too early to draw conclusions, but must it not be asked whether it is not necessary to work out in our Community what one might call a Charter of Participation? In the Community we have put forward proposals for the European company which have not been adopted by the Council; this does not particularly encourage the Commission at this stage to add further proposals regarding participation in the firm.

In any event, I can promise you that the problem of man in the firm will be one of our major concerns and that dialogue on this subject will be continued.

I should now like to turn to the problem of relations with the developing coun-

tries. I have not been able to read all the reports, but I do wish to give special prominence to the one by my former teacher, Professor Tinbergen. I read with great interest, on page 2 of his report, "since, by our standards, the *greater part of the world is poor, our aim over the next decade* must be to raise output to the highest possible level." This means that it is not only with the needs of industrial societies in mind, but also the position of the poor countries, that we must raise output to the highest possible level over the next decade. I agree with the aims set out by Mr Tinbergen, but what does "as high as possible" mean? At present growth has no limit. As regards the stepping-up of growth, I should like to back some of the conclusions in Mr Tinbergen's report. "The *future of all countries has become less certain since the study* by the Massachusetts Institute of Technology pointed to the possibility of a rapid deterioration of the environment and an insufficiently rapid growth of reserves of natural resources. This might throw quite a different light on the problems so far examined in connection with the development of our economies;" and he goes on: "but all views formed to date regarding the development of the rich and poor countries may be affected. A very considerable amount of research will therefore be essential in order to improve our insight into this aspect of development." I fully agree with Professor Tinbergen and I think that we can all go along with that. These were the reasons behind my letter to the President and to the other Members of the Commission, to which I shall return later, but I should like to discuss certain matters mentioned by me in that letter. First of all, what does "growth" mean—growth of what, growth of the world population, growth of all regions, because there are rich regions and poor regions where growth is normally limited already, as there are differences in growth between the rich and poor parts of the world "Growth" can assume different aspects; there are about a *dozen* types and sorts of growth. It can be characterized by the population level, it can be applied to the quality of *life*, and *then we have two completely different concepts*. The Tinbergen Report impressed me greatly in that respect, and I think that we should take particularly careful note of its recommendations. This means, first, that we must establish new relations with the poor countries in the matter of world agreements on commodities, and then, as I advocated at Santiago, abolish duties on processed products, which are generally lower in trade between the rich countries than as between rich and poor countries We must change this situation. The duty on certain manufactured products entering the Community does not seem especially high when it amounts to 7-8 %, but a tariff of this level may be prohibitive and prevent the establishment of industries in the poor countries, which will be unable to find outlets in our

Community because the 8 % applies not to the value added but to the basic commodity. Product agreements must therefore be worked out—for cereals, sugar, vegetable oils. As Mr Tinbergen puts it in his report, we must choose between industries in which value is added through labour and those in which the value added is attributable to capital. With regard to sugar, for example, we must cut our output, just as we should ask certain sectors of the textile industry to reduce their output in order to make room for more exports from poor countries. These are the considerations by which we must be guided in developing the Community's industry. This means—and it is very important—that we must take structural measures to promote adaptation to such a better international division of labour, as we are in the process of doing in the sphere of agriculture.

In regard to manufactured products, the Community has taken a step forward with the progressive abolition of tariffs on a number of manufactured products; now we are being asked at Santiago for the progressive abolition of the ceilings in connection with the granting of generalized preferences which was decided upon last year. We cannot disregard this request, although we have already made concessions, unlike the United States. But that is not enough; the Community has a duty to set an example. I do not think that there are any great dangers to our industry in such action; on the contrary, I believe that it can be beneficial to our industry. In this connection I should like to quote from a recent speech by Mr Robert McNamara:

"It is essential that this plan (more manufactured goods out of the developing countries) be carried out in full, but much more is required; the proposed preference agreement would increase the developing countries' exports of manufactured goods by about only $ 1 000 million per year, and if these countries are to maintain the necessary momentum of a 15 % growth in manufactured exports, their annual volume, which rose from less than $ 2 000 million in 1960 to $ 7 000 million in 1970, will have to quadruple to $ 28 000 million by 1980. This is clearly going to be an enormous task. But one must not dismiss its feasibility and certainly not on the grounds that it would impose an intolerable import burden on the wealthy countries. Should the $ 28 000 million from export from the developing countries be achieved it would amount to only about 7 % of the expected manufactured imports of the affluent countries and would represent less than 1% of their gross national product . . ."

Well, Ladies and Gentlemen, I think that is decisive.

I now wish to speak of the matter closest to my heart, namely, the environment. Mr Spinelli rejected the idea put out recently, in particular by the Club of Rome, that the solution is purely and simply to opt for a zero rate of growth. I for my part have never said that it was necessary to adopt purely and simply a zero rate of growth. I harbour a certain fear, however, of a society that enables us to put men on the moon but not to organize the life of man on earth. We may cherish the hope that Europe will provide an answer to this problem but I can say at this time that Europe can do nothing as long as it does not possess truly effective decision-making centres. If 100 or 110 hours of meetings between the Ministers of Finance and Ministers of Agriculture and the Commission are needed in order to reach a decision laying down the price of cereals or pork, then how are we to solve all the problems confronting us at the moment, in particular the problem of growth, without really changing our Community and providing it with appropriate institutions? That is my great fear.

Naturally, we all desire development and growth and I believe that this makes it imperative for us to agree on certain points.

On this subject I should like to quote from President Heinemann, who said "Earth was given to man for him to maintain it, not exploit it." The whole point lies in that phrase "maintain the earth" in such a way as to produce stability and perhaps even growth in the broader sense of the word, with an improvement in the quality of life; I hope that we shall be able to do this. In my letter to my colleagues in the Commission, which was confidential but has fallen into the public domain, my aim was to set out the new problems which will face us, in order to make us ask ourselves what part Europe could play in this colossal task. When Professor Tinbergen states that "a high degree of priority must be given to scientific research projects stemming from the work carried out by Forester and Meadows of the MIT at the prompting of the Club of Rome," this means that research and studies must be undertaken and I believe that it is also the job of our Community to tackle these problems. If we consider that the world population will reach seven thousand million, if we wish to maintain this rate of population growth, then production to cover basic food needs will have to be stepped up, because hundreds of millions are still going hungry; I believe that enormous investment in arable land is needed, be it in Africa, the East or the Far West, but water is also needed, and have

we enough power for the water? The solution here may be the exploitation of solar energy, because it is non-polluting. We must also take into account the greatly increasing use of pesticides, especially insecticides, which in the last decade has jumped from 20 000 tons to about 300 000 tons, and will very soon exceed a million tons on a world-wide basis, because no regard is had to what may be called a harmonious balance of nature—the ecological balance. In this context, I must say, Ladies and Gentlemen, that I am horrified to note the killing of migratory birds in certain regions in Italy. Birds are one of the basic elements in the biological balance, and so we ask firmly, and we must ask emphatically, that Italy should put a stop to this practice. Civilization is respect for nature, and Italy was and remains, for all of us from the North, the cradle of civilization. The fewer birds there are, therefore, the more insecticides will be used. I wonder whether it is coincidental—and here I am again speaking as a technocrat—that the quantity of DDT used in Italy is three times as great as in Denmark, three and a half times as great as in Germany and four and a half times as great as in the United Kingdom. I give these figures merely to show you that there are links between human life and the balance of nature.

In the future we shall need very heavy capital spending, naturally on the environment, in order to combat pollution, to maintain the ecological balance but also because we want a world in which the underprivileged will be able to raise their standard of living. Industry in the poor countries will have to be set up or expanded, and if steps are not taken today there will be hundreds of millions of unemployed in those countries, which will inevitably have its effect on stability. At Santiago Mr McNamara gave some figures: 25 % of the world's population can be considered affluent; in other words, 75 % are poor. The annual *per capita* income of the affluent is $ 2 400, compared with $ 180 a year for the poor, and if now we project everything decided upon by the United States, the FAO, UNCTAD, in short, all agreed programmes on trade and development, etc., we find, according to Mr McNamara's estimate, that by 1980 the rich will have raised their average income to $ 3 600, and the poor will only have raised theirs from $ 180 to $ 280; this means that the gap will have widened from $ 2 200 to $ 3 300. Conclusions must be drawn from this, meaning that we must do far more to help the poor countries than is planned. What does "far more" mean? Is it possible to do far more for the development of these countries? Can we, having regard to our own growth, really give more aid? I believe we can, and it is essential to do so. Our aid now stands at 0.35 % of our gross national product, and is to rise to 0.7 %; this is the

target for 1975. Do you know that this increase in our financial aid to poor countries from 0.35 to 0.7% represents no more than one and a half per cent of our GNP increase, i.e., while thus raising the volume of their aid to the developing countries, the developed countries continue to enrich themselves; I wanted to emphasise this point because if we talk about growth in Europe, or *growth in the United States, in industrialized* societies, this growth that we desire turns against the human race and against humanity because we find that the only result of such a marked growth is that disparities in the world continue to increase very rapidly.

What does all this mean to development prospects? I think that we must reach the conclusion that a different pattern for the distribution of this growth must be found. Subject to the needs of ecological balance and the need to improve the distribution of wealth in the world, the rich countries must help the poor ones; this solidarity must operate within Europe, as in the whole world. As regards collective facilities needed inside industrialized countries, there is a question that we must ask ourselves: can the *per capita* consumption of material goods in our countries—the rich ones—be maintained? No, in my opinion it is not possible; even if there is still further growth, I do not believe so. And naturally, all this must also be seen against the background of the finiteness of the earth's resources.

I believe, Ladies and Gentlemen, that it depends upon all of us, on the efforts that we put in—and a lot will be needed—on the research that we carry out and the action to which it leads. If we have the political courage to adapt our society we shall contribute towards the survival of humanity. Our conference is part of the struggle for the future of a happy society. The outcome depends upon us; it will be attained if each one of us takes new ideas with him, to his home, into his environment, his factory, his office, and not only ideas new to him, but ideas new to others as well; if each one of us entertains the hope and conviction of changing society into something different from and better than in the past.

In order to achieve this we must act at national level, and if possible at world level, but in any event at European level. Europe is waiting for an example to be set and Europe must accordingly provide itself with institutions such that it can square up to these problems and find an answer to them. It is with this hope that I bring the proceedings of this conference to a close.

LIST OF THE PARTICIPANTS IN THE CONFERENCE "INDUSTRY AND SOCIETY IN THE EUROPEAN COMMUNITY"

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F. Accardo	Direttore generale del ministero e della programmazione economica Roma
A. Adam	Directeur à la SNCB Bruxelles
G. Agnelli	Presidente della FIAT Torino
E. Ahlsen	Chief of Division Landsorganisasjonen i Norge Oslo
G. Alasia	Segretario della Camera del lavoro CGIL di Torino
M. Albert	Inspecteur des finances Paris
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